

**UNITED STATES DISTRICT COURT
FOR THE SOUTHERN DISTRICT OF NEW YORK**

FIRE & POLICE PENSION ASSOCIATION OF
COLORADO, individually and on behalf of all
those similarly situated,

Plaintiff,

vs.

BANK OF MONTREAL, BMO FINANCIAL
CORP., BMO NESBITT BURNS INC., BMO
CAPITAL MARKETS CORP., BANK OF
AMERICA MERRILL LYNCH, MERRILL
LYNCH CANADA INC., DEUTSCHE BANK
AG, DEUTSCHE BANK SECURITIES INC.,
DEUTSCHE BANK SECURITIES LIMITED,
THE BANK OF NOVA SCOTIA, SCOTIA
CAPITAL (USA) INC., SCOTIA CAPITAL INC.,
CANADIAN IMPERIAL BANK OF
COMMERCE, CIBC WORLD MARKETS CORP.,
CIBC WORLD MARKETS, INC., HSBC
HOLDINGS PLC, HSBC BANK PLC, HSBC
NORTH AMERICA HOLDINGS INC., HSBC
SECURITIES (USA) INC., HSBC BANK
CANADA, NATIONAL BANK OF CANADA,
NATIONAL BANK FINANCIAL INC.,
NATIONAL BANK OF CANADA FINANCIAL
INC., ROYAL BANK OF CANADA, RBC
DOMINION SECURITIES INC., RBC CAPITAL
MARKETS, LLC, TORONTO-DOMINION
BANK, TD SECURITIES INC., TD SECURITIES
(USA) LLC.

Defendants.

Docket No.

**CLASS ACTION
COMPLAINT**

JURY TRIAL DEMANDED

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Plaintiff Fire & Police Pension Association of Colorado (“Plaintiff”) complains upon personal knowledge, its own acts, and information and belief, against Defendants (defined in ¶¶ 41-157, below) for Defendants’ violations of the Sherman Act, 15 U.S.C. § 1 et seq., Commodity Exchange Act, 7 U.S.C. § 1 et seq. (“CEA”), Racketeer Influenced Corrupt Organization Act, 18 U.S.C. §§ 1961-1968 (“RICO”), and common law as follows:

INTRODUCTION

1. This action arises from Defendants’ unlawful conspiracy to increase the profitability of their derivatives trading business by manipulating the Canadian Dealer Offered Rate (“CDOR”) during the period of at least August 9, 2007 through at least June 30, 2014 (“Class Period”).

2. Defendants are horizontal competitors and the largest dealers of financial instruments priced, benchmarked, and/or settled based on CDOR (collectively “CDOR-Based Derivatives”) in the United States.

3. CDOR is an interest rate benchmark created by the Canadian Bankers’ Association (“CBA”) that was intended to reflect the cost of borrowing Canadian dollars in North America.

4. Defendants are CBA members and were responsible for setting CDOR during the Class Period. Each trading day, Thomson Reuters calculated CDOR based on interest rate submissions from Defendants. These submissions were supposed to reflect the rate at which Defendants would be willing to lend Canadian dollars as of 10:15 A.M. Eastern Standard Time.

5. Defendants conspired to suppress CDOR by making artificially lower submissions that did not reflect the true rate at which they were lending Canadian dollars in North America. Economic analyses show that Defendants consistently made CDOR submissions well-below prevailing Canadian dollar money market rates, inexplicably offering to lend for less than what it cost them to borrow funds. Defendants also submitted *identical* artificially low CDOR submissions on hundreds of days during the Class Period, indicative of their collusion in the rate-setting process.

6. Suppressing CDOR increased Defendants' profits from their CDOR-Based Derivatives positions. Data from the Bank of Canada shows that, beginning in 2007, Defendants significantly scaled back their CDOR-based lending business, through which they received CDOR-based interest payments from borrowers. At the same time, Defendants began aggressively marketing and selling interest rate swaps, forward rate agreements, and other CDOR-Based Derivatives to North American investors. Defendants' specifically targeted pension funds, hedge funds, and corporations, including those in the United States, offering to *pay* interest based on CDOR in exchange for receiving fixed payments.

7. This rapid growth in CDOR-Based Derivatives transactions resulted in Defendants having a net-short exposure to CDOR during the Class Period. At its peak, the notional amount of Defendants' CDOR-Based Derivatives positions was more than 50 times larger than their CDOR-based loan portfolio. Thus, Defendants profited by suppressing CDOR because it reduced the amount of interest owed under CDOR-Based Derivatives contracts with investors.

8. Defendants' intentional, manipulative acts harmed Plaintiff and Class members. Plaintiff transacted more than \$1.2 billion in CDOR-Based Derivatives, including directly with Defendants Bank of America Merrill Lynch, BMO, BNS, Deutsche Bank, HSBC, RBC, and TD Bank, from within the United States while Defendants suppressed CDOR. As a result of Defendants' CDOR suppression, Plaintiff paid more or received less than it should have in those CDOR-Based Derivatives transactions.

9. This is not the first time that Defendants have conspired to manipulate a financial benchmark to benefit their trading businesses. Defendants Bank of America Merrill Lynch, Deutsche Bank, and HSBC have collectively paid approximately \$4.4 billion in fines to multiple government regulators for manipulating at least 11 financial benchmarks, including U.S. dollar LIBOR, Yen LIBOR, Euribor, Sterling LIBOR, Swiss franc LIBOR, SIBOR, SOR, and multiple

foreign exchange rates. Defendants' agreement to suppress CDOR is part of a broader pattern of price fixing and collusion intended to benefit Defendants' trading businesses at the expense of investors.

10. Given the persistent, pervasive, and secret nature of Defendants' conspiracy to manipulate CDOR, Plaintiff believes it will unearth additional evidence in support of its claims after a reasonable opportunity for discovery.

JURISDICTION AND VENUE

11. This Court has subject matter jurisdiction over this action pursuant to 28 U.S.C. §§ 1331 and 1337(a); sections 4 and 16 of the Clayton Act, 15 U.S.C. §§ 15(a) and 26; Section 22 of the CEA, 7 U.S.C. § 25; and Section 1964 of RICO, 18 U.S.C. §1964. This Court also has jurisdiction over the state law claims under 28 U.S.C. § 1367 because those claims are so related to the federal claims that they form part of the same case or controversy, and under 28 U.S.C. §1332 because the amount in controversy for the Class exceeds \$5,000,000 and there are members of the Class who are citizens of a different state than Defendants.

12. Venue is proper in this District pursuant to, among other statutes, section 22 of the CEA, 7 U.S.C. § 25(c); §§ 4, 12, and 16 of the Clayton Act, 15 U.S.C. §§ 15(a), 22 and 26; §1965 of RICO, 18 U.S.C. § 1965; and 28 U.S.C. §1391(b), (c), and (d). One or more Defendants resided, transacted business, were found, or had agents in this District; and a substantial portion of the affected interstate trade and commerce described in this Complaint was carried out in this District.

13. Each Defendant transacts CDOR-Based Derivatives throughout the United States with counterparties located in the United States. For example, Defendants Bank of Montreal, The Bank of Nova Scotia, Canadian Imperial Bank of Commerce, HSBC Holdings plc, National Bank of Canada, Royal Bank of Canada, and Toronto-Dominion Bank each transacted CDOR-Based Derivatives from within the United States throughout the Class Period.

14. Defendants are the most active CDOR-Based Derivatives dealers in the country and the largest Canadian dollar derivatives traders in the world. Every three years, the Federal Reserve Bank of New York conducts a survey of the over-the-counter (“OTC”) interest rate derivatives and foreign exchange market. This survey measures the “turnover,” or volume of transactions, in foreign exchange and interest rate derivatives within the United States. The Federal Reserve Bank of New York survey only includes data from the largest dealers located within the United States and transactions that are located within the United States. Dealers located outside of the United States report their figures to the central bank where they are located.

15. Defendants Bank of Montreal, Canadian Imperial Bank of Commerce, Deutsche Bank, and Royal Bank of Canada each participated in the Federal Reserve Bank of New York’s survey of foreign exchange and interest rate derivatives dealers during the Class Period. In the survey, these Defendants reported that they entered into foreign exchange and interest rate derivatives transactions, including transactions priced, benchmarked, and/or settled based on CDOR, from within the United States.

16. The “Big 6” Canadian banks include the Bank of Montreal, Bank of Nova Scotia, Canadian Imperial Bank of Commerce, National Bank of Canada, Royal Bank of Canada, and Toronto-Dominion Bank. The Big 6 each transact in the United States market,¹ including the United States market for CDOR-Based Derivatives. Specifically, these banks on average held more than \$1 trillion in CDOR-based swap contracts with U.S. counterparties during the Class Period.²

17. Defendants intentionally exploited the U.S. market for CDOR-Based Derivatives. For example, BMO Nesbitt Burns, CIBC World Markets, National Bank Financial, RBC Dominion

¹ See e.g., Robert J. McKeown, *An Overview of the Canadian Banking System: 1996 to 2015*, Queen’s Economics Department Working Paper No. 1379, at 2 (Apr. 17, 2017), available at http://qed.econ.queensu.ca/working_papers/papers/qed_wp_1379.pdf.

² *Id.*

Securities, Scotia Capital, and TD Securities, created CanDeal, the world's "leading electronic marketplace for Canadian dollar fixed income securities and derivatives."³

18. These Defendants established CanDeal to attract "buy-side participants" (*i.e.* non-bank investors like Plaintiff and the Class) for Canadian dollar-denominated derivatives trades, including CDOR-Based Derivatives, in the United States market. CanDeal's "dealer network" for CDOR-based interest rate swaps in the United States region includes the following 8 Defendants: Bank of America Merrill Lynch, BMO Capital Markets, CIBC World Markets, Bank of Nova Scotia, HSBC, RBC Capital Markets, TD Securities, and National Bank Financial.⁴

19. TD Securities' New York-based Head of Interest Rates Trading, Michael Donnelly, explained that "CanDeal complements our growth strategy and our desire to represent Canada by serving our clients through this global marketplace."⁵

20. The "Big 6" Defendants also use CanDeal to complement their marketing efforts aimed at investors in the U.S. For example, CanDeal has employed a Director of sales "responsible for managing and building client relations in the U.S." since at least 2011.⁶

21. HSBC Bank Canada and Deutsche Bank Canada also traded substantial quantities of CDOR-based interest rate and foreign exchange derivatives with investors and on exchanges located in the United States such as the Chicago Mercantile Exchange (the "CME") during the Class Period.

³ *Canadian Electronic Fixed Income & Derivatives Surpasses \$10 Trillion on CanDeal*, CanDeal, (Jun. 28, 2014), available at: <http://www.candeal.com/news/news-press-releases/2014-06-18/canadian-electronic-fixed-income-derivatives-volumes-surpass-10>.

⁴ *One Screen. Direct Access to Global Market Liquidity*, CanDeal, (Oct. 6, 2014), available at <https://web.archive.org/web/20141006143635/http://www.candeal.com:80/markets>.

⁵ *\$1 Trillion traded on CanDeal*, CanDeal, (Aug. 8, 2017), available at <http://www.candeal.com/fr/node/106>.

⁶ *Elizabeth Kenny, Director, US & Europe Sales*, CanDeal, (last visited Dec. 11, 2017), available at <http://www.candeal.com/about/team>; *LinkedIn profile of Sue Lemon*, LINKEDIN, last visited Jan. 11, 2018, available at <https://www.linkedin.com/in/sue-lemon-cfa-420a5628/>.

22. Defendants Bank of America Merrill Lynch, HSBC, and TD Bank, were among the top 25 banks with the largest notional amounts of derivatives contracts outstanding in the United States, including CDOR-Based Derivatives, at the end of 2011.⁷ RBC was also one of the top 25 holding companies with the largest notional amount of derivatives outstanding at the end of 2011.⁸

23. Throughout the Class Period, the Canadian dollar/United States dollar currency pair was by far the most widely traded currency pair involving the Canadian dollar, accounting for roughly eighty percent of all foreign exchange contracts in which the Canadian dollar served as one leg of the transaction.⁹

24. Specifically, data compiled by the Bank for International Settlements in 2013 found that there was a greater turnover of Canadian dollar interest rate derivatives traded in the United States than in Canada.¹⁰

25. Additionally, Bank of Canada data shows that a majority of Canadian-dollar derivatives trades executed by a counterparty in Canada involve a non-Canadian counterparty on the other side of the trade.¹¹ Many of these counterparties are investors located in the United States, including Plaintiff and the Class.

26. Each Defendant is also a clearing member of SwapClear, the largest platform for clearing interest rate swaps in the United States market. SwapClear cleared more than 99% of all

⁷ OCC's *Quarterly Report on Bank Trading and Derivatives Activities Fourth Quarter 2011*, Comptroller of the Currency, at Table 1, <https://www.occ.gov/topics/capital-markets/financial-markets/derivatives/derivatives-quarterly-report.html>

⁸ *Id.* at Table 2.

⁹ Bank For International Settlements, *Triennial Central Bank Survey: Interest rate derivatives market turnover in 2013* (2013), available at <http://www.bis.org/publ/rpfx13irt.pdf>

¹⁰ *Id.*

¹¹ *The Canadian Approach to Central Clearing*, Bank of Canada, 43. Fin. Sys. Rev. Dec. 2012 at 44, available at <http://www.bankofcanada.ca/wp-content/uploads/2012/12/fsr-1212-chande.pdf>

outstanding cleared interest rate swaps as of September 2012.¹² SwapClear clears trillions of dollars of Canadian dollar interest rate swaps that call for floating payments tied to CDOR.¹³

27. Defendants used electronic messaging, chatrooms, telephones, emails and other electronic means of communication, transmitted by wire, across interstate and international borders to carry out the unlawful acts and practices alleged in this Complaint. As a direct result of the CDOR-related misconduct alleged in this Complaint, Defendants purposefully directed false and manipulated CDOR rates to the United States market via Thomson Reuters, which published artificial and manipulated CDOR rates to U.S. market participants who transacted in CDOR-Based Derivatives.

28. Defendants also targeted investors in the United States for transactions that were priced and/or settled based on CDOR from offices located in the United States. For example, Defendants' U.S.-based dealers, including BMO Harris, HSBC Securities (USA), NBC Securities, RBC Capital Markets, and Scotia Capital (USA), implemented their price-fixing conspiracy in the United States by marketing and selling CDOR-Based Derivatives that would profit from the scheme.

29. Derivatives traders that transacted in CDOR-Based Derivatives were also directly involved in manipulating CDOR. For example, the Investment Industry Regulatory Organization of Canada ("IIROC") uncovered that Defendants intentionally placed CDOR-Based Derivatives traders who were "dually employed" by both a dealer subsidiary (*e.g.*, RBC Dominion Securities) and the parent bank (*e.g.*, RBC) in charge of making CDOR submissions. These same traders engaged in transactions for CDOR-Based Derivatives with U.S. investors and knew that any gains resulting from Defendants' suppression of CDOR came at the expense of Plaintiff and the Class.

¹² *Id.* at 48.

¹³ *SwapClear, What we Clear*, LCH.Clearnet (last visited, Nov. 28, 2017), available at <http://www.swapclear.com/what/>.

30. Additionally, the structure of Defendants' business naturally involved, and required, Defendants' U.S.-based subsidiaries' knowledge and participation in the conspiracy. The CDOR submitters could not have profited from their rate fixing scheme without the help of their U.S.-based trading arms to execute price-fixed trades. Throughout the Class Period, Defendants' U.S.-based dealers communicated their trading positions to their CDOR-panel corporate parents, and traded on advanced knowledge of the CDOR fix rate. The subsidiaries then remitted profits from the trades to the CDOR Panel Defendants or other defendants. Thus, the CDOR-Panel Defendants used their U.S. subsidiaries and trading operations to profit from the CDOR manipulation by selling price-fixed products in the forum in furtherance of their conspiracy.

31. A substantial portion of Defendants' CDOR exposures, *i.e.*, the amount they stood to gain from suppressing CDOR, arose from their transactions with counterparties in the OTC market and on exchanges, including the CME, located in the United States. Defendants thus purposefully directed their conduct at the U.S. market when they suppressed CDOR to benefit their derivatives positions traded in the United States.

32. Defendants, as CDOR contributor banks, members of the CBA, and dominant players in the U.S. market for CDOR-Based Derivatives, knew that Thomson Reuters, Bloomberg, and other financial information services disseminated CDOR throughout the United States. Defendants also knew that CDOR was used in the United States to price, benchmark and/or settle Canadian dollar-denominated derivatives purchased, sold, or owned here.

33. Defendants caused artificial CDOR rates, trade confirmations incorporating these false rates, and communications containing requests to manipulate these rates to be distributed over U.S. wires, using servers located in the United States. Defendants' manipulative conduct had a direct, substantial, and reasonably foreseeable effect on United States domestic commerce. Such direct

effects injured Plaintiff and give rise to Plaintiff's claims under the Foreign Trade Antitrust Improvements Act.

34. Defendants Deutsche Bank, Bank of Montreal, Bank of Nova Scotia, HSBC, and National Bank of Canada registered their New York branch offices with the New York State Department of Financial Services ("NYSDFS") to do business in this state under New York Banking Law § 200-b.

35. Defendants Bank of America Merrill Lynch, Deutsche Bank, HSBC, CIBC, BNS, BMO, and RBC all act as clearing members for and trade derivatives on various U.S.-based exchanges, including the Chicago Mercantile Exchange.

36. Defendants Bank of America Merrill Lynch and Deutsche Bank AG are subject to enhanced supervision by the Board of Governors of the Federal Reserve System. Defendants Bank of America Merrill Lynch and Deutsche Bank AG are members of the Federal Reserve Board ("FRB") of Governors' Large Institution Supervision Coordinating Committee, which is designed to coordinate supervision of the largest, most systematically important financial institutions in the United States.

37. Defendants employed personnel who were tasked with actively marketing and selling CDOR-Based Derivatives to investors located in the United States and trading on exchanges located in the United States. *See* Part II, below.

38. Defendants actively marketed and sold products that were priced and settled based on CDOR from their trading desks located in the United States. Defendants established and maintained these trading desks for the purpose of entering into derivatives transactions, including CDOR-based foreign exchange and interest rate derivatives transactions on exchanges and with counterparties (including Plaintiff and Class members) located in the United States.

39. Defendants also committed tortious acts in the United States when they directed their manipulation of CDOR and the prices of CDOR-Based Derivatives at the United States in furtherance of their conspiracy U.S.-based Defendant Bank of America Merrill Lynch.

PARTIES

A. Plaintiff

40. Plaintiff Fire & Police Pension Association of Colorado (“FPAA”) was established in January 1980 and administers a statewide, multiemployer, public employee retirement system providing defined benefit plan coverage as well as death and disability coverage for police officers and firefighters throughout the State of Colorado. FPAA engaged in U.S.-based transactions for CDOR-Based Derivatives during the Class Period including: (a) CDOR-based interest rate swaps; and (b) CDOR-based foreign exchange forwards directly with Defendants Bank of America Merrill Lynch, BMO, BNS, Deutsche Bank, HSBC, RBC, and TD Bank, as defined below. These transactions were entered at artificial prices proximately caused by Defendants’ unlawful manipulation and restraint of trade as alleged herein. As a result, FPAA was damaged and suffered legal injury, including monetary losses, when it paid more for or received less than it should have in these CDOR-Based Derivatives transactions. *See* Part VI, below.

B. Defendants

1. Bank of Montreal

41. Defendant Bank of Montreal is a Canadian bank with its principal place of business in Montreal, Canada. Bank of Montreal uses the trade name “BMO Financial Group” for all of its operating entities and has three operating groups: Personal and Commercial Banking, Wealth Management, and BMO Capital Markets.

42. Bank of Montreal has U.S. branch offices in New York, New York, and Chicago, Illinois, and an agency office in Houston, Texas.

43. Bank of Montreal provides a broad range of retail banking, wealth management, and investment banking products and services to retail, small business and commercial customers in the U.S. through BMO Harris Bank, N.A., a U.S.-based subsidiary.

44. Defendant BMO Financial Corp., is a Delaware corporation and wholly-owned subsidiary of Bank of Montreal. It is also the top-tier U.S. holding company for most of Bank of Montreal's U.S. subsidiaries.

45. Defendant BMO Capital Markets Corp., ("BMO Capital Markets") is Bank of Montreal's investment and corporate banking division and provides a full suite of financial products and services to clients in the United States. BMO Capital Markets reported \$1.08 billion Canadian dollars in net income for 2016.

46. BMO Capital Markets is a leading, full-service North American financial services provider offering treasury management, market risk management, and institutional sales and trading. BMO Capital Markets has approximately 2,400 professionals in 30 locations around the world, including 10 offices in the United States. For instance, Justin H. Hoogendoorn, BMO Capital Markets's Chief Investment Strategist, is based in its Chicago office.¹⁴ In this capacity, Hoogendoorn manages a team that advises on developments in the fixed-income markets, including the use of CDOR-Based Derivatives.

47. Bank of Montreal filed its most recent U.S. Resolution Plan on December 31, 2015 as required by Title I, Section 165(d) of the Dodd-Frank Act.

48. Bank of Montreal is a bank holding company and financial holding company under the Bank Holding Company Act of 1956.

¹⁴ *LinkedIn Profile of Justin Hoogendoorn*, LINKEDIN, last visited Oct. 17, 2017, available at <https://www.linkedin.com/in/justin-hoogendoorn-3267465/>.

49. During the Class Period, Bank of Montreal successfully exploited the United States market for financial derivatives. In its 2007 Annual Report, BMO Capital Markets highlighted its success in the United States, reporting that they “combine[d] all of [their] businesses serving a broad range of corporate, institutional and government clients in Canada and the United States” to offer “foreign exchange, derivatives, debt and equity research, and institutional sales and trading.”¹⁵ It further wrote that they “leveraged our Canadian market leadership to expand our presence in the United States,” achieved “improvement in cross-selling performance over the prior year in our effort to grow U.S. revenues,” and “U.S. Investment and Corporate Banking revenue growth” was “fueled by continued hiring of 13 sector and product specialists for key roles in the United States.”¹⁶

50. Bank of Montreal and its affiliates trade substantial quantities of CDOR-Based Derivatives through their operations in the United States. For example, at year-end 2014, Bank of Montreal reported that its U.S. operations held \$24.8 billion in gross notional outstanding of interest rate and foreign exchange derivatives.¹⁷ A substantial portion of this exposure arises from CDOR-Based Derivatives. For example, Bank of Montreal’s Capital Markets division employs FX forward traders in its Chicago and New York offices that trade Canadian dollar FX forwards and Canadian dollar futures contracts with counterparties and on exchanges located in the United States.¹⁸

51. Bank of Montreal operates an “Interest Rate Derivatives Sales & Trading” desk in Chicago, Illinois that trades interest rate products with investors located in the United States,

¹⁵ *BMO Annual Report 2007*, Cover Page, available at <http://www.sedar.com/GetFile.do?lang=EN&docClass=2&issuerNo=00002530&issuerType=03&projectNo=01197111&docId=2101336>.

¹⁶ *Id.*

¹⁷ *Consolidated Financial Statements for Holding Companies—FR Y-9C*, BMO FINANCIAL CORP., at 32 (Dec. 31, 2014), available at https://www.ffc.gov/nicpubweb/NICDataCache/FRY9C/FRY9C_1245415_20141231.PDF.

¹⁸ *See id.*

including interest rate swaps with reset payments tied to CDOR.¹⁹ Personnel located in the United States load these trades into bank-wide interest rate risk management software called “Calypso.” This software tracks Bank of Montreal’s bank-wide CDOR exposure, *i.e.* the amount it stands to gain or lose with each change in CDOR.²⁰

52. Defendant BMO Nesbitt Burns Inc. is a wholly-owned subsidiary of Bank of Montreal and a member of BMO Financial Group. BMO Nesbitt Burns Inc. serves as a market maker for CDOR-Based Derivatives in the North American financial market. In this capacity, BMO Nesbitt Burns Inc. or its subsidiaries trade CDOR-Based Derivatives with counterparties in the United States market.

53. BMO Nesbitt Burns Inc. was on the CDOR Panel until on or around June 2014, when the Investment Industry Regulatory Organization of Canada (“IIROC”) banned CDOR-Based Derivatives dealers from serving on the panel.

54. Defendants Bank of Montreal, BMO Financial Corp., BMO Nesbitt Burns Inc., and BMO Capital Markets are collectively referred to as “BMO.”

2. Bank of Nova Scotia

55. Defendant The Bank of Nova Scotia (“Bank of Nova Scotia”), which also operates under the trade name Scotiabank, is a Canadian bank with its headquarters in Toronto.

56. Bank of Nova Scotia is Canada’s leading international bank and a financial services provider in North America, Latin America, the Caribbean and Central America, and parts of Asia with 89,191 employees and assets of \$906 billion (as at July 31, 2017) and 3,016 offices. Bank of Nova Scotia shares trade on the Toronto and New York Stock Exchanges.

¹⁹ See *Job Listing: Interest Rate Derivatives Desk Support Specialist*, (Last visited Dec. 1, 2017) available at <https://www.velvetjobs.com/job-posting/interest-rate-derivatives-desk-support-specialist-185646>.

²⁰ *Id.*; see also *Transparent Treasury*, Calypso, (May 2016), available at http://www2.calypso.com/Portals/0/CiMay2016_TransparentTreasury.pdf?ver=2017-06-28-032214-190

57. Bank of Nova Scotia advertises that it is “one of the leading foreign banks serving large national and multinational corporations in the U.S. through its Global Banking and Markets, Global Transaction Banking and Wealth Management business lines.”

58. Bank of Nova Scotia has operated in the United States for over 100 years and offers a U.S. equities platform and a Global Fixed income platform that offers CDOR-Based Derivatives for sale to investors located in the United States.

59. Bank of Nova Scotia maintains four legal entities in the United States, including a state-licensed branch in Houston and state-licensed agency offices in New York and Miami. Bank of Nova Scotia also owns BNS de Puerto Rico, an insured depository institution organized under the laws of the Commonwealth of Puerto Rico.

60. In 2016, Bank of Nova Scotia held \$126 billion in assets in the United States and derived approximately \$640 million in income from U.S.-based activities.²¹

61. Bank of Nova Scotia operates a New York branch that provides a full range of derivative products and services to corporate and institutional clients in the United States, including foreign exchange, base and precious metals, fixed income, commodities, and interest rates.²² The New York branch also offers institutional sales and trading and investment banking services within the United States as well as local and cross-border cash and treasury management solutions, and wealth management products and services. In connection with these activities, Bank of Nova Scotia offers CDOR-Based Derivatives for sale to investors in the United States.

²¹ BNS 2016 Annual Report, at 4, 9 (2016), available at http://www.BNS.com/ca/en/files/16/11/BNS_Annual_Report_-_2016.pdf.

²² BNS's Fixed Income business houses its interest rates, foreign exchange, and futures trading operations. See *Bloomberg Canadian Fixed Income 2016*, Frederik Nilsson, available at https://bloombergcandianfixedincome2016.sched.com/speaker/fredrik_nilsson.1v19zlef.

62. For example, managing director Blake Hampton-Davies serves as head of the corporate and commercial derivative sales and structuring teams for North America and the head of commercial FX sales.²³ He coordinates Bank of Nova Scotia's corporate and commercial derivatives franchises and the commercial FX sales initiative in New York, Toronto, Montreal, and Calgary. Hampton-Davies also cultivates new client business and builds upon bank relationships with front line sales responsibilities.

63. Bank of Nova Scotia is one of the leading foreign banks serving large national and multinational corporations in the United States. Bank of Nova Scotia, which bases its operations in the United States primarily in offices located in New York and Houston, delivers local and cross-border cash and treasury management solutions to support its multinational clients and financial institutions across the world.²⁴

64. In its capacity as a Registered Swaps Dealer,²⁵ Bank of Nova Scotia transacts derivatives, including CDOR-Based Derivatives such as interest rate swaps, cross-currency swaps, and foreign exchange forwards, from offices located within the United States.²⁶

65. Bank of Nova Scotia boasts that its U.S.-based Interest Rate Sales and Trading team, which trades CDOR-Based Derivatives with counterparties in U.S. financial markets, demonstrates "strong business continuity, including over 100 years top-tier presence in the U.S. financial markets."

²³ LinkedIn Profile of Blake Hampton-Davies, LINKEDIN, last visited Oct. 17, 2017, available at <https://www.linkedin.com/in/blake-hampton-davies-37348717/>.

²⁴ *The Bank of Nova Scotia U.S. Resolution Plan Public Summary*, BNS, at 2 (Dec. 19, 2014), available at <https://www.fdic.gov/regulations/reform/resplans/plans/bns-165-1412.pdf>.

²⁵ A swap dealer is an entity that holds itself out as a dealer in swaps; makes a market in swaps; regularly enters into swaps with counterparties as an ordinary course of business for its own account; or engages in any activity causing the entity to be commonly known in the trade as a dealer or market maker in swaps. See Swap Dealer (SD) Registration, NATIONAL FUTURES ASSOCIATION, (last visited Oct. 9, 2017), available at <https://www.nfa.futures.org/registration-membership/who-has-to-register/sd-msp.html>.

²⁶ *Id.* at 6-7.

66. Bank of Nova Scotia filed its most recent U.S. Resolution Plan on December 18, 2015 as required by Title I, Section 165(d) of the Dodd-Frank Act.

67. Bank of Nova Scotia is a registered bank holding company under the Bank Holding Company Act of 1956.

68. Defendant Scotia Capital (USA) Inc. (“SCUSA”) is a wholly-owned subsidiary of Bank of Nova Scotia with \$13.748 billion in assets. SCUSA, which is based in New York, NY, is a broker-dealer that is registered under the U.S. Securities Exchange Act of 1934, and a member of the Financial Industry Regulatory Authority and the Securities Investor Protection Corporation. SCUSA is also registered as a futures commission merchant with the U.S. Commodity Futures Trading Commission (“CFTC”) and a member of the National Futures Association. SCUSA is a provisionally registered swap dealer with the CFTC. SCUSA’s primary business activities include: (i) debt and equity securities underwriting; (ii) fixed income trading and equity trading; and (iii) securities borrowing and lending. SCUSA’s principal revenue sources are underwriting fees, execution commissions, trading gains, and interest income.

69. Defendant Scotia Capital Inc. is a subsidiary of Bank of Nova Scotia. Scotia Capital Inc. serves as a market maker for CDOR-Based Derivatives in the North American financial market. In this capacity, Scotia Capital Inc. trades CDOR-Based Derivatives with counterparties in the United States market.

70. Scotia Capital Inc. served on the CDOR Panel until on or about June 2014, when the IIROC banned CDOR-Based Derivatives dealers from serving on the panel.

71. Collectively, Defendants Bank of Nova Scotia, SCUSA, and Scotia Capital Inc., are referred to as “BNS.”

3. Canadian Imperial Bank of Commerce

72. Defendant Canadian Imperial Bank of Commerce is a Canada-based global financial institution with its headquarters in Toronto.

73. Canadian Imperial Bank of Commerce has 11 million personal banking and business clients and three major business units – Retail and Business Banking, Wealth Management and Capital Markets. Its Capital Markets division provides integrated global markets products and services, investment banking advice, corporate banking and research to corporate, government and institutional clients around the world.

74. Canadian Imperial Bank of Commerce reported approximately \$1.35 billion in net income generated in the United States in 2016.²⁷

75. Canadian Imperial Bank of Commerce and its subsidiaries conduct a substantial amount of CDOR-Based Derivatives trading from within the United States and with investors located in the United States. For example, in a recent regulatory filing, Canadian Imperial Bank of Commerce reported that its U.S. operations held \$10.27 billion in gross notional outstanding of interest rate and foreign exchange derivatives.²⁸ A substantial portion of these financial positions are priced by reference to CDOR.

76. Canadian Imperial Bank of Commerce operates in the United States through five entities: (i) CIBC Inc. (“CIBCI”), a commercial finance company; (ii) Defendant CIBC World Markets Corp. (“CIBC WM”), a registered broker-dealer; (iii) the New York branch of CIBC (“CIBC NY”); (iv) Atlantic Trust Company, National Association (“ATNA”), a limited-purpose national bank; and (v) AT Investment Advisers, Inc. (“ATIA”), a registered investment adviser.

²⁷ CIBC 2016 Annual Report (2016), *available at* https://www.cibc.com/content/dam/about_cibc/investor_relations/pdfs/annual_reports/2016/ar-16-en.pdf.

²⁸ *Bank Holding Company Performance Report June 30, 2017*—FR BHCPR, CIBC HOLDCO INC., at 10 (Jun. 31, 2017), available at https://www.ffiec.gov/nicpubweb/NICDataCache/BHCPR/BHCPR_5014141_20170630.PDF.

77. CIBC WM has six offices in the United States that offer a variety of investing and risk management services and products including fixed income, commodities, and foreign exchange products.

78. CIBC WM is a market maker for CDOR-Based Derivatives in the North American financial market. In this capacity, CIBC WM trades CDOR-Based Derivatives with counterparties in the United States market.

79. Canadian Imperial Bank of Commerce filed its most recent U.S. Resolution Plan on December 20, 2016 as required by Title I, Section 165(d) of the Dodd-Frank Act.

80. Defendant CIBC World Markets, Inc. offers banking and financial advisory services. It provides cash management, correspondent brokerage, corporate lending, debt and equity financing, mergers and acquisitions, and prime brokerage services. Additionally, the firm offers risk management, sales and trading, securities lending, and securitization services. It caters to energy, financial, government, mining, power and utilities, real estate, and technology and media sectors in the North American market. CIBC World Markets, Inc. operates as a subsidiary of Canadian Imperial Bank of Commerce.

81. CIBC World Markets Inc. was a CDOR Panel member until on or around June 2014, when the IIROC banned CDOR-Based Derivatives dealers from serving on the panel.

82. Collectively, Defendants Canadian Imperial Bank of Commerce, CIBC WM, and CIBC World Markets Inc. are referred to as “CIBC”.

4. HSBC

83. Defendant HSBC Holdings PLC is a British multinational banking and financial services company, with its headquarters in London, England.

84. Defendant HSBC North America Holdings Inc. is a wholly-owned subsidiary of HSBC Holdings PLC. HSBC Holdings PLC’s U.S. operations are organized as subsidiaries of HSBC

North America Holdings Inc.²⁹ As of the end of 2013, HSBC North America Holdings, Inc. held roughly \$5.19 trillion in notional value of OTC derivatives.³⁰

85. HSBC Holdings PLC is the parent company of one of the world's largest banking and financial services groups, with subsidiaries providing services in 75 countries and territories and employing approximately 13,000 people in the United States.³¹ Through its subsidiaries, HSBC Holdings PLC's U.S.-based dealers trade in the over-the-counter foreign exchange and derivatives markets, which include interest rate swaps, forward rate agreements, foreign exchange swaps, and futures contracts. HSBC Holdings PLC's American Depositary Receipts are listed on the New York Stock Exchange.

86. Defendant HSBC Bank plc is a wholly-owned subsidiary of HSBC Holdings PLC and provides various banking products and services worldwide. It operates through Retail Banking and Wealth Management, Commercial Banking, Global Banking and Markets, and Global Private Banking segments.

87. HSBC Holdings PLC's former global head of foreign exchange cash trading, Mark Johnson, was indicted and arrested by the FBI in the United States after an investigation of HSBC Bank plc provides various banking products and services worldwide.³² Prior to his arrest, Johnson relocated to HSBC Bank plc's New York offices for his role as head of foreign exchange and

²⁹ <https://www.financialresearch.gov/briefs/files/2015-02-12-systemic-importance-indicators-for-us-bank-holding-companies.pdf>.

³⁰ *Id.*, at 2, Fig. 1.

³¹ *HSBC Holdings plc Annual Report and Accounts 2016* (2016), available at <http://www.hsbc.com/investor-relations/group-results-and-reporting/annual-report>.

³² Department of Justice, *Global Head of HSBC's Foreign Exchange Cash-Trading Desks Arrested for Orchestrating Multimillion-Dollar Front Running Scheme* (2016), available at <https://www.justice.gov/opa/pr/global-head-hsbc-s-foreign-exchange-cash-trading-desks-arrested-orchestrating-multimillion>.

commodities in the Americas. In 2014, the CFTC ordered HSBC Bank plc to pay \$275 million in fines for manipulating foreign exchange rates in the United States.³³

88. HSBC Bank plc employs foreign exchange and interest rate derivative traders in New York, including FX traders Rohan Yelvigi, who “executes daily foreign exchanges trades, spot, forward, swaps, options structures,” Adler Shiga, Sooyun Byun, and Vice President of foreign exchange Elio Spiezia.³⁴ HSBC Bank plc also employs foreign exchange sales staff to target investors in New York, including a team dedicated to soliciting foreign exchange business with United States-based hedge funds. Jason Merritt, Vice-Presidents of FX Sales, and Sandra Tamayo, Senior Vice President and Head of FX Bank Sales, are both based in HSBC Bank plc’s New York office.³⁵

89. From 2006 to 2015, Senior VP of Institutional FX Sales Patrick Pisapia and Senior VP of FX Sales Paul Denslow were based in New York.³⁶ Lon Dolan is currently Senior Vice-President of FX Sales for HSBC Bank plc’s New York office.

90. HSBC Holdings PLC filed its most recent U.S. Resolution Plan on December 31, 2015 with the Board of Governors of the Federal Reserve System and the FDIC, as required by Title I, Section 165(d) of the Dodd-Frank Act.

³³ U.S. Commodity Futures Trading Commission, *CFTC Orders Five Banks to Pay over \$1.4 Billion in Penalties for Attempted Manipulation of Foreign Exchange Benchmark Rates* (2014), available at <http://www.cftc.gov/PressRoom/PressReleases/pr7056-14>.

³⁴ LinkedIn Profile of Rohan Yelvigi, LINKEDIN, last visited Oct. 17, 2017, available at <https://www.linkedin.com/in/rohan-yelvigi-9981b52/>; LinkedIn Profile of Adler Shiga, LINKEDIN, last visited Oct. 17, 2017, available at <https://www.linkedin.com/in/adler-shiga-34185716/>; LinkedIn Profile of Sooyun Byun, LINKEDIN, last visited Oct. 17, 2017, available at <https://www.linkedin.com/in/sooyun-byun-75063246/>; LinkedIn Profile of Elio Spiezia, LINKEDIN, last visited Oct. 17, 2017, available at <https://www.linkedin.com/in/elio-spiezia-53508920/>.

³⁵ LinkedIn Profile of Jason Merritt, LINKEDIN, last visited Oct. 17, 2017, available at <https://www.linkedin.com/in/jason-merritt-40217350/>.

³⁶ LinkedIn Profile of Patrick Pisapia, LINKEDIN, last visited Oct. 17, 2017, available at <https://www.linkedin.com/in/patrick-pisapia-8b74b5a2/>; LinkedIn Profile of Paul Denslow, LINKEDIN, last visited Oct. 17, 2017, available at <https://www.linkedin.com/in/paul-denslow-818a5a/>.

91. Defendant HSBC Bank Canada is a wholly-owned subsidiary of HSBC Holdings plc and is headquartered in Vancouver, Canada. HSBC Bank Canada is HSBC Holdings plc's principal banking subsidiary in Canada.

92. HSBC Bank Canada serves as a market maker for CDOR-Based Derivatives in the North American financial market. In this capacity, HSBC Bank Canada trades CDOR-Based Derivatives with counterparties in the United States market.

93. HSBC Bank Canada was a CDOR Panel Bank until on or around June 2014, when the IIROC banned CDOR-Based Derivatives dealers from serving on the panel.

94. Through its subsidiaries, HSBC North America Holdings, Inc. is an official Foreign Exchange Counterparty to the New York Federal Reserve. This status is reserved for the most substantial market makers in foreign exchange products in the United States market, and has the following eligibility criteria:

- Demonstrate a substantial presence as a market maker that provides two-way liquidity in foreign exchange, in more than one market center/time zone.
- Have, or have arrangements for another party to provide services of, a "back office" of sufficient size and experience to be able to (1) confirm and arrange settlement of transactions with the New York Fed and (2) manage trading at the volume levels expected by the New York Fed.

95. HSBC Bank Canada trades Canadian dollar-denominated foreign exchange, futures and swaps priced and/or settled based on CDOR with counterparties and on exchanges located in the United States.

96. HSBC Holdings PLC, acting through its Global Banking and Markets Division, trades billions of dollars in CDOR-Based Derivatives in the United States. Its Americas division, which includes both the United States and Canada, is based in New York.

97. Defendant HSBC Securities (USA) Inc. is an indirect wholly owned subsidiary of HSBC North America Holdings Inc. It is a registered broker-dealer of securities under the Securities

Exchange Act of 1934 and a registered Futures Commission Merchant with the CFTC. HSBC Securities (USA) Inc. trades interest rate derivatives, futures, options, and FX forwards, including CDOR-Based Derivatives, from within the United States.

98. Collectively, HSBC Holdings PLC, HSBC North America Holdings Inc., HSBC Bank plc, HSBC Securities (USA) Inc., and HSBC Bank Canada are referred to as “HSBC.”

5. National Bank of Canada

99. Defendant National Bank of Canada is the leading bank in Quebec. It is headquartered in Montreal, but maintains a substantial presence in the United States derivatives market through its branch office in New York.³⁷

100. National Bank of Canada also has a U.S. registered broker dealer and institutional equities sales office in New York, through its wholly-owned subsidiary, Defendant National Bank of Canada Financial Inc. (“NBCFI”).³⁸

101. National Bank of Canada identifies its New York Branch as a “material entity” that is regulated and licensed by the NYSDFS and the Federal Reserve Bank of New York.³⁹ The New York Branch provides commercial and wholesale banking services to institutional clients.⁴⁰

102. National Bank of Canada trades Canadian dollar forwards, futures, and CDOR-based swaps both from its New York Branch and home offices in Canada with counterparties and on exchanges in the United States.⁴¹

³⁷ See *Public Section of 2013 § 165(d) Tailored Resolution Plan*, National Bank of Canada, (Dec. 31, 2013) at 21, *available at* <https://www.fdic.gov/regulations/reform/resplans/plans/bnp-165-1512.pdf>.

³⁸ *Id.* at 5.

³⁹ *Id.* at 7.

⁴⁰ *Id.*

⁴¹ *Id.* at 11.

103. Defendant National Bank Financial, Inc. (“NBFI”) is an investment banking subsidiary of National Bank of Canada. It operates through more than 90 offices in the United States, Canada, and the United Kingdom.

104. NBFI markets and sells derivatives products, including Canadian dollar foreign exchange and interest rate derivative products, to Canadian, U.S., and international investment funds, and offers sales and trading services to U.S. and foreign financial institutions, mutual fund companies, private investment firms, broker-dealers, insurance and eFinance companies, and banks.

105. NBFI serves as a market maker for CDOR-Based Derivatives in the North American financial market. In this capacity, NBFI trades CDOR-Based Derivatives with counterparties in the United States market.

106. NBCFI is a wholly-owned subsidiary of NBFI. It is incorporated in Delaware and headquartered in New York, New York.⁴²

107. NBCFI reports that it “is engaged in agency transactions with institutional clients and broker dealers and principal trading on active financial markets.”⁴³

108. NBCFI enters into various transactions involving derivative financial instruments, including swap, forward, future and option contracts.⁴⁴

109. NBFI was a CDOR Panel Bank until on or around June 2014, when the IIROC banned CDOR-Based Derivatives dealers from serving on the panel.

110. Collectively, National Bank of Canada, NBFI, and NBCFI are referred to as “NBC”.

⁴² *Consolidated Statement of Financial Condition as of October 31, 2014*, National Bank of Canada Financial Inc. (Oct. 31, 2014), available at https://nbfc.ca/~media/FinancialMarkets/PDF/NBCF_Financial_Condition_Statement_20141031.pdf.

⁴³ *Id.*

⁴⁴ National Bank of Canada Financial Inc. and Subsidiaries, *Notes to Consolidated Statement of Financial Condition* (Oct. 31, 2014).

6. Royal Bank of Canada

111. Defendant Royal Bank of Canada is a Canadian multinational financial services company and the largest bank in Canada. It is also registered as a bank holding company with the Federal Reserve.⁴⁵

112. In the United States, Royal Bank of Canada offers a full suite of products and services, which include corporate and investment banking, equity and debt origination and distribution, and structuring and trading. In the U.S., Royal Bank of Canada has full industry sector coverage, offers a full investment banking product range, and competes with large U.S. and global investment banks as well as smaller regional firms. Royal Bank of Canada is a provisionally registered swap dealer with the CFTC.

113. Royal Bank of Canada employs more than 80,000 full- and part-time employees who serve more than 16 million personal, business, public sector and institutional clients through offices in Canada, the U.S., and 36 other countries.⁴⁶

114. Defendant RBC Capital Markets, LLC (“RBC Capital Markets”) is a premier global investment bank organized in Minnesota and is a wholly-owned subsidiary of the Royal Bank of Canada.

115. Royal Bank of Canada filed its most recent U.S. Resolution Plan on December 31, 2015 as required by Title I, Section 165(d) of the Dodd-Frank Act.⁴⁷

116. Royal Bank of Canada has operated in the United States since 1899, when Royal Bank of Canada opened a New York State chartered agency.⁴⁸ Royal Bank of Canada maintains four

⁴⁵ See *Public Section of 2015 § 165(d) Tailored Resolution Plan*, Royal Bank of Canada, (Dec. 31, 2015) at 12, available at https://bnmf.ca/~media/FinancialMarkets/PDF/NBCF_Financial_Condition_Statement_20141031.pdf.

⁴⁶ *Royal Bank of Canada Annual Report 2016* (2016), available at http://annualreports.rbc.com/ar2016/pdfs/RBC_english_AR16_ENG.pdf.

⁴⁷ See *Public Section of 2015 § 165(d) Tailored Resolution Plan*, Royal Bank of Canada, (Dec. 31, 2015) at 3-4, available at <https://www.fdic.gov/regulations/reform/resplans/plans/rbc-165-1512.pdf>.

federal branches (three in New York, New York and one in Miami, Florida); two state agencies in Texas; four representative offices, located in California, Delaware, Texas and Washington State; a subsidiary national bank, and a full service broker-dealer with its principal place of business in New York, New York.⁴⁹ Royal Bank of Canada has over 700 traders in New York and continued expanding its New York operations over the last decade.⁵⁰ In 2016, Royal Bank of Canada announced additional plans to boost its share in the U.S. investment banking market and expand its presence in U.S. capital markets.⁵¹

117. In 2010, Royal Bank of Canada built a new 71,000-square-foot trading floor and hired approximately seventy people in trading and technology. Robert Grubert, managing director, head of U.S. equity sales and trading, celebrated that he “can [now] walk down the rows and go from options to equities to emerging markets to high-yield to investment grade to FX” and can teach traders about relationships between products.⁵² In 2012, Royal Bank of Canada reported employing 1,705 front-office and 897 back-office employees in the United States with equity and fixed income⁵³ sales and trading capabilities to target investors located in the United States.

118. Royal Bank of Canada generates substantial revenue from trading in U.S. financial markets. From 2011 to 2012, Royal Bank of Canada generated 25% of its Fixed Income and Currency revenue, which includes interest rate and FX derivatives, from the United States. Royal

⁴⁸ *Id.* at 5.

⁴⁹ *Id.* at 5.

⁵⁰ See Boyd Erman, *How RBC is making waves in New York*, THE GLOBE AND MAIL, May 23, 2010, available at <http://www.theglobeandmail.com/globe-investor/how-rbc-is-making-waves-in-new-york/article4320190>.

⁵¹ See John Tilak, *RBC targets market share gains in U.S. investment banking*, REUTERS, Mar. 4, 2016, available at <http://www.reuters.com/article/us-rbc-usa-idUSKCN0W52LW>.

⁵² Kerry Massaro, *RBC Capital Markets Transforms Its Trading Floor* (2010), available at <http://www.wallstreetandtech.com/careers/rbc-capital-markets-transforms-its-trading-floor/d/d-id/1263071>.

⁵³ Royal Bank of Canada classifies Canadian dollar interest rate sales and trading as “Fixed Income” products. *Rates*, RBC Capital Markets, LLC, (last visited Jan. 12, 2018), available at <https://www.rbccm.com/en/expertise/fixed-income/rates.page>.

Bank of Canada's New York FX business includes executives such as Elsa Lignos, Managing Director and Head of North American G10⁵⁴ FX Strategy, and Daniel Tenengauzer, head of Emerging Markets and Global FX Strategy.⁵⁵

119. Royal Bank of Canada's trading activities in New York include its status as an official Foreign Exchange Counterparty to the New York Federal Reserve. This status is reserved for the most substantial market makers in foreign exchange products in the United States market and has the following eligibility criteria:

- Demonstrate a substantial presence as a market maker that provides two-way liquidity in foreign exchange, in more than one market center/time zone.
- Have, or have arrangements for another party to provide services of, a "back office" of sufficient size and experience to be able to (1) confirm and arrange settlement of transactions with the New York Fed and (2) manage trading at the volume levels expected by the New York Fed.

120. In 2012, Jonathan Hunter, Global Head, Fixed Income & Currencies of RBC Dominion Securities, gave a speech for RBC's "Analyst and Investor Day." In this discussion, Hunter described exactly what the Fixed Income and Currencies group does, offering and trading derivative and FX products from New York, one of the bank's primary hubs. Some of these specific functions include "provid[ing] derivative solutions to clients through the use of interest rate swaps, cross-currency swaps and provid[ing] foreign exchange services and solutions."⁵⁶ Hunter has overseen RBC Capital Markets' Fixed Income and Currencies business from Royal Bank of Canada's New York offices since 2006. In total, Royal Bank of Canada derives roughly \$8 billion annually from its activities in the United States, including from trading CDOR-Based Derivatives.

⁵⁴ The Canadian dollar is a G10 currency.

⁵⁵ LinkedIn Profile of Elsa Lignos, LINKEDIN, last visited Oct. 17, 2017, available at <https://www.linkedin.com/in/elsa-lignos-4b613030/>; LinkedIn Profile of Daniel Tenengauzer, LINKEDIN, last visited Oct. 17, 2017, available at <https://www.linkedin.com/in/daniel-tenengauzer-80a23813/>.

⁵⁶ *RBC Capital Markets Analyst and Investor Day, Friday June 1, 2012*, RBC, available at <http://www.rbc.com/investisseurs/pdf/cmspeech.pdf>.

121. RBC Capital Markets boasts that it “offer[s] investors a full range of US dollar, Canadian dollar, Sterling, Euro and Australian dollar rates and rate derivative products, all backed by timely insights and analysis from our global experts,” to investors located in the United States. RBC Capital Markets, LLC sells Canadian dollar-denominated interest rate derivatives, interest rate options, cross currency swaps, basis swaps and other products settled by reference to CDOR to investors located in the United States.⁵⁷

122. As a general practice, Defendant RBC Capital Markets negotiates and enters into interest rate swaps with counterparties in the United States as agent for Royal Bank of Canada, which is the actual “principal” or “counterparty” to the transaction.⁵⁸

123. Royal Bank of Canada trades interest rate swaps with counterparties in the United States such as municipalities and public school districts and enforces its rights under these contracts in United States District Courts. For example, Royal Bank of Canada recovered \$9 million from a Pennsylvania public school district for payments due under an interest rate swap after prevailing on summary judgment in the Middle District of Pennsylvania.⁵⁹

124. RBC Capital Markets also transacts in CDOR-Based Derivatives with counterparties in the United States from its offices in Toronto. During the Class Period, RBC Capital Markets successfully targeted the United States market for CDOR-Based Derivatives. For example, RBC Capital Markets’ North American Head of Interest Rate Derivatives and Structured Rates Sales

⁵⁷ Rates, RBC CAPITAL MARKETS, last visited Oct. 5, 2017, available at <https://www.rbccm.com/en/expertise/fixed-income/rates.page>.

⁵⁸ See *State Coll. Area Sch. Dist. v. Royal Bank of Canada*, No. 4:10-CV-1823, ECF No. 111-2, at 56 (M.D. Pa. Oct. 5, 2012).

⁵⁹ See *State Coll. Area Sch. Dist. v. Royal Bank of Canada*, No. 4:10-CV-1823, 2012 WL 12893876, at *9 (M.D. Pa. Oct. 5, 2012); *State College Area Makes \$6 Million Payment Toward Swap Settlement*, Centre Daily Times, Mar. 2, 2013, available at <http://www.centredaily.com/news/article42817461.html>.

divided time between New York and Toronto in an effort that doubled its market share in the United States market for Canadian dollar interest rate derivatives.⁶⁰

125. Royal Bank of Canada and RBC Capital Markets are together one of the largest dealers of CDOR-Based Derivatives in the United States, and a substantial amount of Royal Bank of Canada's CDOR rate exposure arises from transactions with counterparties located in the United States. For example, at year-end 2015, Royal Bank of Canada reported that its U.S. operations held \$216.36 billion in gross notional outstanding of interest rate and foreign exchange derivatives.⁶¹

126. Financial journalists have credited Royal Bank of Canada's "expertise in the Canadian dollar, in which it is one of the dominant players" and explained that it "is often the starting point for the development of wider dealing relationships with clients."⁶²

127. Defendant RBC Dominion Securities Inc. is a wholly-owned broker subsidiary of Royal Bank of Canada.

128. RBC Dominion Securities Inc. trades CDOR-Based Derivatives with counterparties and on exchanges located in the United States from its offices in Canada.

129. RBC Dominion Securities Inc. was a CDOR panel member until June 2014, when the IIROC banned CDOR-Based Derivatives dealers from serving on the panel.

130. Royal Bank of Canada's public filings reveal that it targeted the United States market for financial derivatives products, which include Canadian dollar-denominated derivatives priced

⁶⁰ LinkedIn Profile of Harleen Bains, LINKEDIN, last visited Oct. 5, 2017, available at <https://www.linkedin.com/in/harleen-bains-7844205/>.

⁶¹ *Consolidated Financial Statements for Holding Companies—FR Y-9C*, RBC USA Holdco Corporation, at 32 (Dec. 31, 2015), available at https://www.ffiec.gov/nicpubweb/NICDataCache/FRY9C/FRY9C_3226762_20151231.PDF.

⁶² RBC aims for top 10; Canadian bank looks to capitalize on its credit rating, EUROMONEY, (Mar. 21, 2012) <https://www.euromoney.com/article/b12kjhvcgv6j3f/rbc-aims-for-top-10-canadian-bank-looks-to-capitalize-on-its-credit-rating>.

based on CDOR. For example, in Royal Bank of Canada's 2008 "Financial Review," it reported that its "Strategic Vision and Goals" included the following:

In the U.S., our goal is to be a leading provider of banking, wealth management and capital markets services by building on and leveraging our considerable capabilities. The U.S., with its geographic proximity, cultural similarities and close trade relationships with Canada, will continue to be a focus of future growth as we build on our market positions in selected businesses.

...

In Capital Markets, we intend to maintain our position as a top-tier leader in the U.S. mid-market and will remain committed to our businesses, such as fixed income,⁶³ foreign exchange, infrastructure finance and structured products.

131. Royal Bank of Canada employs an "enterprise-wide" risk management approach to measure its trading exposure to day-to-day movements in interest rates.⁶⁴ Accordingly, Royal Bank of Canada included CDOR-Based Derivatives positions with counterparties located in the United States when it determined the amount it stood to gain or lose from movements in CDOR.

132. Royal Bank of Canada, RBC Capital Markets, LLC, and RBC Dominion Securities Inc. are collectively referred to as "RBC."

7. Toronto-Dominion Bank

133. Defendant Toronto-Dominion Bank is a Canadian multinational banking and financial services corporation headquartered in Toronto, Ontario. Toronto-Dominion Bank markets Canadian dollar-denominated derivatives to a customer base of Canadian and U.S. investors.

134. Toronto-Dominion Bank's U.S. operations trade substantial quantities of interest rate and foreign exchange derivatives from within the United States. At year-end 2015, Toronto-

⁶³ RBC's Fixed Income business houses its "full range of US dollar, Canadian dollar, Sterling, Euro, and Australian dollar rates and rate derivatives products, and futures trading operations." <https://www.rbccm.com/en/expertise/fixed-income/rates.page>.

⁶⁴ Royal Bank of Canada: Annual Report 2008, Ex-2, Management Discussion and Analysis, at 85.

Dominion Bank reported that its U.S. operations held \$192.61 billion in gross notional outstanding of interest rate and foreign exchange derivatives.⁶⁵

135. Defendant TD Securities Inc. (“TDSI”) is the investment banking arm of Toronto-Dominion Bank, operating in the North American, European, and Asian markets. It provides capital market products and services to corporate, government, and institutional clients in the United States and Canada. TDSI’s business segments include investment banking, debt capital markets, institutional equities, private equity, and foreign exchange.

136. TDSI employs personnel in its New York office to market CDOR-Based Derivatives to customers in the United States market. For example, TDSI advertises that it has the “expertise to tailor a comprehensive range of risk management products” for customers. TDSI advertises “Interest Rate Swaps” to “[a]llow your organization to convert its floating rate debt into an instrument that is effectively a fixed rate debt to protect against rising interest rates.”⁶⁶

137. The contact persons for purchasing CDOR-based interest rate swaps in the U.S. market from TDSI are Managing Directors Greg Young and Duncan Swezey. Both Directors are based in TDSI’s New York office and sell interest rate swaps to customers in this District and throughout the United States.

138. Defendant TD Securities (USA) LLC (“TDS USA”) is an indirect wholly owned subsidiary of Toronto-Dominion Bank. TDS USA operates as a broker-dealer in U.S. debt, corporate debt, equity and money market securities. TDS USA also acts as principal and an agent in the underwriting, distribution and private placement of debt and equity securities and other financial instruments.

⁶⁵ *Consolidated Financial Statements for Holding Companies—FR Y-9C*, TD Bank US Holding Company, at 32 (Jun. 30, 2015), available at https://www.ffiec.gov/nicpubweb/NICDataCache/FRY9C/FRY9C_1249196_20150630.PDF.

⁶⁶ *Interest Rate Derivatives*, TD SECURITIES, http://www.tdsecurities.com/tds/content/CMkt_InterestRateDerivatives?..=&language=en_CA&changeLanguage=Y.

139. Through its subsidiaries, Toronto-Dominion Bank employs derivatives and foreign exchange traders in the United States.⁶⁷ For example, Tony Lee, the Director of Global Equity Derivatives for TDS USA, is based in their New York office.⁶⁸

140. Toronto-Dominion Bank's Fixed Income, Currencies & Metal core business line includes products such as interest rate swaps, municipal bonds, corporate bonds, foreign exchange and repurchase agreements.

141. Toronto-Dominion Bank filed its most recent U.S. Resolution Plan on December 31, 2015 with the Board of Governors of the Federal Reserve System and the FDIC, as required by Title I, Section 165(d) of the Dodd-Frank Act.

142. TDSI was on the CDOR Panel until on or around June 2014, when the IIROC banned CDOR-Based Derivatives dealers from serving on the panel.

143. Toronto-Dominion Bank, TD Securities (USA) LLC, and TD Securities Inc. are collectively referred to as "TD Bank."

8. Bank of America Merrill Lynch

144. Defendant Bank of America Merrill Lynch is an American global investment bank headquartered in Charlotte, North Carolina.

145. Defendant Bank of America Merrill Lynch traded substantial quantities of interest rate and foreign exchange derivatives from within the United States. For example, at year-end 2016, Bank of America Merrill Lynch reported that its Global Markets division held \$50 billion in derivative assets, including those priced, benchmarked, and/or settled based on CDOR.

⁶⁷ LinkedIn Profile of Yubai Liu, LINKEDIN, last visited Oct. 5, 2017, available at <https://www.linkedin.com/in/yubai-alex-liu-b075625b/>.

⁶⁸ LinkedIn Profile of Tony Lee, LINKEDIN, last visited Oct. 5, 2017, available at <https://www.linkedin.com/in/tony-lee-cfa-5ab61189/>.

146. Defendant Merrill Lynch Canada, Inc. was a CDOR Panel Bank from the beginning of the Class Period through December 5, 2012, when it withdrew from the CDOR Panel.

147. Collectively, Defendants Bank of America Merrill Lynch and Merrill Lynch Canada, Inc. are referred to as “BOA.”

9. Deutsche Bank

148. Defendant Deutsche Bank AG is a German financial services company headquartered in Frankfurt, Germany. Deutsche Bank AG maintains a substantial presence in CDOR-Based Derivatives trading in the United States.

149. Deutsche Bank AG employed executive and senior-level interest rate and foreign exchange swaps traders in its New York office to trade products denominated in G10 currencies⁶⁹ during the Class Period. From its New York office, Deutsche Bank AG offered foreign exchange and interest rates derivatives over the counter to its U.S. clients and traded CDOR-Based Derivatives on U.S. exchanges. Deutsche Bank AG employs full-time specialized legal counsel at its New York office who specifically, “draft, review, and advise on over-the-counter derivatives and options (including credit, FX and [interest] rates) and structured finance transactions.”⁷⁰

150. Deutsche Bank AG’s U.S. headquarters is in New York. Its New York branch is located at 60 Wall Street, New York, NY 10005. Deutsche Bank AG considers its New York branch to be a “material entity” within the United States. Deutsche Bank AG’s U.S.-based dealers trade in the over-the-counter foreign exchange and derivatives markets, which includes Canadian dollar-denominated interest rate swaps, forward rate agreements, foreign exchange swaps, currency swaps, and CME Canadian dollar futures contracts.

⁶⁹ The Canadian dollar is a G10 currency.

⁷⁰ “Counsel in Global Markets Team” job posting, available at https://www.theladders.com/job/counsel-in-global-markets-team-deutsche-bank-new-york-ny_34868403.

151. Deutsche Bank AG, New York Branch acts as an agent of Deutsche Bank AG in the United States and in this District. Deutsche Bank AG, New York Branch has been registered with NYSDFS and licensed to do business in this state since 1978. Deutsche Bank AG is also registered with the Board of Governors of the Federal Reserve System. Deutsche Bank AG's New York branch has more than 1,700 employees and total assets exceeding \$152 billion. Deutsche Bank AG is a registered swap dealer with the CFTC.

152. Defendant Deutsche Bank Securities Inc. is a wholly-owned subsidiary of Deutsche Bank AG and engages in a high volume of securities transactions, including clearing activities, currency transactions, interest rate derivatives, and swaps, on behalf of American clients and with counterparties located in the United States and in this District. For example, in its Consolidated Financial Statements for 2014, Deutsche Bank Securities Inc. reported that it held billions of dollars in notional interest rate derivatives contracts, which include CDOR-Based Derivatives.⁷¹

153. Traders in the New York offices of Deutsche Bank AG's Global Finance and Foreign Exchange ("GFF") business manipulated multiple global interest rate benchmarks to benefit their own derivatives positions during the Class Period.⁷² GFF also traded Canadian dollar derivatives, which were priced based on CDOR, from New York with counterparties located in the United States.

154. Deutsche Bank AG's Fixed Income and Currencies business is considered one of its "core businesses."⁷³ The business trades Canadian dollar interest rate and foreign exchange derivatives from its offices in the United States, where it provides interest rate products with its U.S.

⁷¹ *Notes to Consolidated Statement of Financial Condition*, Deutsche Bank Securities, Inc., at 16 (June 30, 2014), available at <https://www.db.com/usa/docs/DBSI-Unaudited-SOFC-6-30-14.pdf>.

⁷² *Matter of Deutsche Bank AG, Deutsche Bank AG New York Branch*, Consent Order Under New York Banking Law §§ 44 and 44-a, (Apr. 23, 2015).

⁷³ *Deutsche Bank Names Co-Head of Fixed Income*, NEW YORK TIMES, (Feb. 5, 2014), available at <https://dealbook.nytimes.com/2014/02/05/deutsche-bank-names-new-co-head-of-fixed-income/>.

clients and maintains a Fixed Income Proprietary Trading team that trades North American interest rate derivatives, including derivatives tied to CDOR.⁷⁴

155. Defendant Deutsche Bank Securities Limited (“DBSL”) is a wholly-owned subsidiary of Deutsche Bank AG. DBSL is a market maker in CDOR-Based Derivatives in the North American financial market.

156. Deutsche Bank AG filed its most recent U.S. Resolution Plan on July 1, 2015 as required by Title I, Section 165(d) of the Dodd-Frank Act.

157. Deutsche Bank Securities Limited was on the CDOR Panel until January 2014, when the OSFI assumed regulatory control of the CDOR rate-setting process. It withdrew from the CDOR Panel immediately thereafter, and was no longer on the CDOR Panel as of January 31, 2014.

158. **The CDOR Panel:** Defendants BMO Nesbitt Burns, Scotia Capital, Inc., CIBC World Markets Inc., Deutsche Bank Securities Limited, HSBC Bank Canada, NBFI, RBC Dominion Securities, Merrill Lynch Canada, Inc., and TD Securities Inc. were members of the CDOR Panel during the Class Period. These entities are referred to collectively as “CDOR Panel Defendants.”⁷⁵

SUBSTANTIVE ALLEGATIONS

I. Background

A. Bankers’ Acceptances

159. Financial market participants commonly distinguish between two kinds of markets: “capital markets”—like the stock market or bond market—where companies go to raise funds for long-term purposes, and the “money market,” where borrowing and lending occurs on a short-term basis, typically for periods of less than one year.

⁷⁴ *Press Release Credit Suisse Appoints Jon Kinol as Global Head of Interest Rate Products*, Credit Suisse, (Feb. 16, 2010) available at <https://www.credit-suisse.com/corporate/en/articles/media-releases/41416-201002.html>.

⁷⁵ Deutsche Bank withdrew from the CDOR Panel in January 2014 when the OSFI assumed regulatory oversight of the rate.

160. Bankers Acceptances (“BAs”) are a type of money market instrument that function like a check. In each BA, a bank agrees to pay a specified amount of money—known as the BA’s “face value”—to the bearer on a certain future maturity date.

161. The number of days between when a BA is issued and when it matures determine its “tenor.” For example, a BA that matures in 90 days has a three-month tenor, while one maturing in 180 days has a six-month tenor.

162. BAs are typically created as a byproduct of commercial transactions. For example, importers frequently use BAs to finance trade, borrowing money to purchase goods for delivery in the future and presenting a BA maturing on the delivery date. Corporations can also use BAs to purchase goods or services by borrowing from a BA lending facility, which is like a credit line.

163. In each instance, the bank issuing the BA to the corporation guarantees payment. This is almost always one of the CDOR Panel Defendants, as they are the largest primary issuers of BAs in Canada, with approximately a 99% market share.⁷⁶

164. Corporate clients pay a “stamping fee” to the issuing bank in addition to any interest for guarantying payment. The stamping fee reflects the borrower’s creditworthiness and the risk that it will default on the underlying loan.

165. Stamped BAs have the same credit rating as the issuing bank and can be freely traded. As the Bank of Canada explains:

When a corporate borrower obtains funds through the bank’s BA lending facility (its BA credit line), the issuing bank guarantees the principal and interest payments on the BA loan. This guarantee is established to upgrade the credit quality of the loan, which allows the bank to resell the BA loan in the secondary market to other

⁷⁶ *Reforming Financial Benchmarks: An International Perspective*, Bank of Canada, June 2014 Fin. Syst. Rev. 45, 51 (June 2014).

investors. These products have the same short-term credit rating as the issuing bank's.⁷⁷

166. BAs trade in the money market at a discount to their face value. The difference between the price a buyer pays for a BA and its face value (*i.e.*, how much they will receive at maturity) represents the yield. For example, assume an investor pays \$98,382.75 to purchase a BA with a face value of \$100,000 that matures in 120 days. When the investor redeems that BA at maturity it will receive the full \$100,000 face value, \$1,617.25 more than what it paid to purchase that BA. The extra \$1,617.25 represents the amount of interest the bank paid to borrow \$98,382.75 for 120 days, or approximately 5% annually.

167. In addition to serving as an investment or form of payment, BAs can also be used to acquire a loan. Banks in Canada, including Defendants, are typically willing to lend against the face value of a BA because payment is guaranteed by another Canadian bank. As a result, a loan against a BA does not reflect the credit rating of the borrower, but of the BA's issuing bank.

168. Canadian banks also lend to borrowers using Floating Rate Notes ("FRNs"). In contrast to a BA, where the interest rate is fixed, an FRN is a type of variable rate loan that calls for periodic interest payments based on CDOR.⁷⁸ FRNs and BAs, including those traded by Defendants, both reference CDOR and are collectively referred to as "CDOR-Based Loans."⁷⁹

B. The Canadian Bankers Association and the CDOR Panel

169. The Canadian Bankers Association ("CBA") created CDOR to reflect the cost of borrowing funds in Canada. Each Defendant, either directly or through an affiliate, was a member of the CBA and CDOR panel during the Class Period.

⁷⁷ Matthieu Truno, Andriy Stolyarov, Danny Auger and Michel Assaf, *Wholesale Funding of the Big Six Canadian Banks*, Spring 2017 Bank of Canada Rev. 52, available at <http://www.bankofcanada.ca/wp-content/uploads/2017/05/boc-review-spring17-truno.pdf>.

⁷⁸ *Id.*

⁷⁹ *Id.*

170. Defendants, through the CBA, had complete control over the CDOR rate setting process during the Class Period. Defendants used this control to facilitate and encourage the manipulation of CDOR through a variety of means. Most significantly, making derivatives traders, who stood to profit from trades dependent on the CDOR rates they fixed, responsible for Defendants' CDOR submissions.

171. In January 2014, the Office of the Superintendent of Financial Institutions Canada (the "OSFI") took control of the CDOR-setting process following a review that identified a conflict of interest between the CDOR Panel Defendants' duty to submit accurate CDOR rates and their trading of CDOR-Based Derivatives for profit.⁸⁰

172. Six months later, in June 2014, IIROC forced the CDOR Panel Dealers to create a code of conduct that banned CDOR-Based Derivatives dealers from making CDOR submissions.⁸¹ This was the first time that any rules, procedures, or codes had been imposed to prevent CDOR manipulation. Before the OSFI's announcement, the CDOR rate-setting process was self-regulated and overseen by the same Defendants that conspired to manipulate it.

C. The CDOR Fixing

173. CDOR is the benchmark used to price Canadian dollar-denominated derivatives in the United States. CDOR serves as a benchmark in both money and derivative markets: it is used as the final settlement price or as a component of the purchase price for OTC and exchange-traded Canadian dollar-denominated derivative. *See* Parts I.D.2-5, below.

174. According to CBA guidelines, CDOR is fixed every business day based on submissions from the CDOR Panel Defendants reflecting the rate at which they are willing to lend

⁸⁰ *Oversight of CDOR Benchmark-Setting Submissions*, OSFI, (Jan. 13, 2014), available at <http://www.osfi-bsif.gc.ca/Eng/Docs/cdor.pdf>.

⁸¹ *IIROC Publishes New Industry-Developed Code of Conduct For CDOR Submission*, Investment Industry Regulatory Organization of Canada, (June 2, 2014), available at http://www.iiroc.ca/Documents/2014/87198e8f-882d-4281-97d0-694a1fbbcba7_en.pdf.

against BAs (*i.e.*, by extending credit to a corporate client, without reference to its credit, through a BA lending facility) as of 10:15 A.M. Eastern Standard Time. Thomson Reuters collects Defendants' submissions for five different loan tenors— one-month, two-month, three-month, six-month and one-year.

175. Next, Thomson Reuters calculates the CDOR “fix” for each tenor by ranking the quotes in numerical order and eliminating the highest and lowest submissions—a procedure known as “topping and tailing”—before averaging the remaining submissions.

176. Thomson Reuters then publishes the resulting average rate to financial data providers, such as Bloomberg, who distribute CDOR within the United States, Canada, and other markets where CDOR is used to calculate the prices and payment due on CDOR-Based Derivatives.

D. CDOR-Based Derivatives

1. The Integrated North American CDOR-Based Derivatives Market

177. The Bank of Canada published a review of the over-the-counter derivatives market in December 2016.⁸² The review explained that the six largest Canadian banks—Defendants CIBC, NBC, BNS, RBC, TD Bank, and BMO—known in Canada as the “Big 6,” were the largest dealers of CDOR-Based Derivatives in the North American market.

178. These Defendants are such active dealers in the United States CDOR-Based Derivatives market that their overall level of trading with U.S. investors is greater than with those in Canada. This is the direct result of Defendants' efforts to exploit the U.S. market. For example, the “Big 6” Defendants invested heavily in creating a platform called “CanDeal” that connected them with CDOR-based swap investors in the United States. Defendants' also implemented CDOR-Based Derivatives marketing plans that were tailored to investors in the United States, such as

⁸² *Toward More Resilient Markets: Over-the-Counter Derivatives Reform in Canada*, BANK OF CANADA, Dec. 2016 Fin. Sys. Rev. 53, available at <http://www.bankofcanada.ca/wp-content/uploads/2016/12/fsr-december-2016-mueller.pdf>.

Plaintiff and the Class. They stationed senior sales and trading employees in the United States, creating rotating positions whereby traders travelled between the United States and Canada, to sell and market CDOR-Based Derivatives. *See* ¶ 124, above.

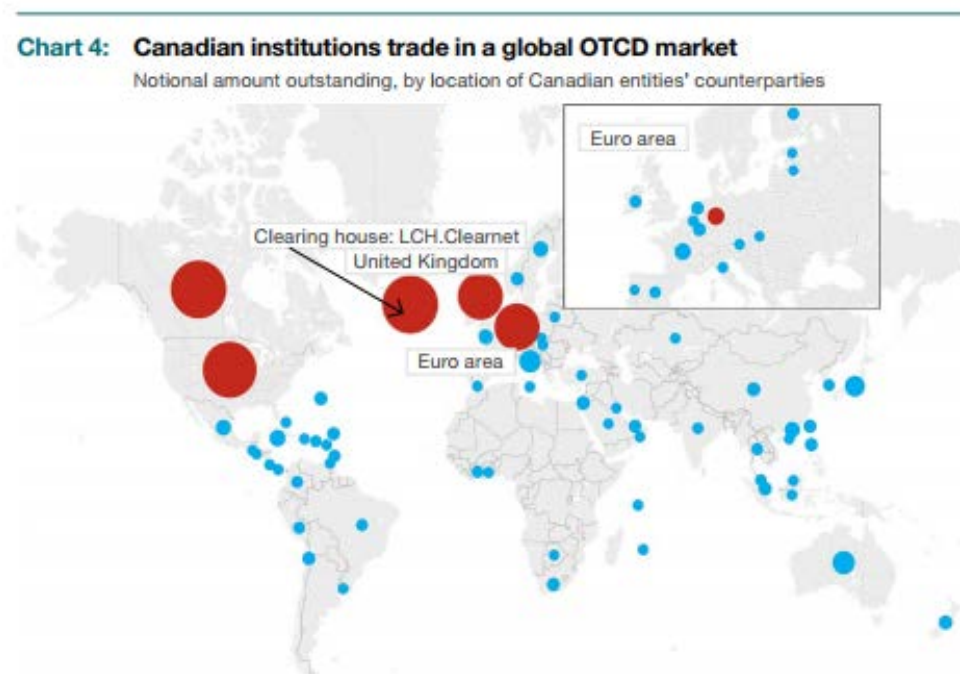


FIGURE 1⁸³

179. Figure 1 above shows the notional amount of derivatives contracts, including CDOR-Based Derivatives, outstanding between the “Big 6” Defendants and counterparties located in each market worldwide. Larger dots represent greater notional amounts outstanding with counterparties in that geographical market. Red dots indicate that the Defendants’ share of notional outstanding in that market is greater than \$1 trillion. Figure 1 demonstrates that the United States is one of the largest markets (if not the largest) for CDOR-Based Derivatives in the world. It also shows that Defendants transacted trillions of dollars in CDOR-Based Derivatives with U.S. counterparties.

⁸³ *Id.*

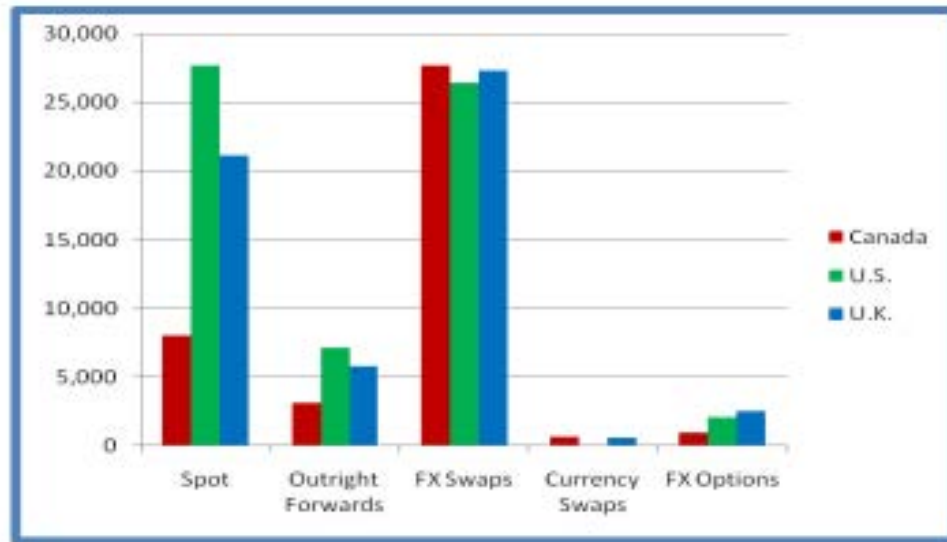


FIGURE 2⁸⁴

180. The United States is also one of the largest markets for other types of CDOR-Based Derivatives, including Canadian dollar foreign exchange forwards and swaps. *See* Part II.D.3-4., below (describing those products). Figure 2 above shows the average daily turnover of foreign exchange instruments involving the U.S. dollar/Canadian dollar currency pair in the United States, Canada and the United Kingdom during 2010. Significantly, the United States is the largest market for Canadian dollar spot and forward transactions, the same CDOR-Based Derivatives traded by Plaintiff during the Class Period. *See* ¶ 40, above. Foreign exchange swap volume, by comparison, is split roughly evenly between the three markets.

181. Figures 1 and 2 establish that Defendants transacted significant amounts of CDOR-Based Derivatives in the United States. Defendants' conspiracy to suppress CDOR therefore directly affected the prices of these financial instruments, which were mathematically priced, benchmarked, and or settled based on CDOR as described below.

⁸⁴ *The Canadian Dollar Foreign Exchange Market: Developments and Opportunities*, Canadian Foreign Exchange Committee, at p. 7, chart 2, (Mar. 5, 2010), available at <http://www.cfec.ca/files/developments.pdf>.

2. CDOR-Based Swaps

182. A swap is an over-the-counter CDOR-based derivative in which two parties exchange the obligation to make a series of periodic payments (*e.g.* monthly) based on some underlying principal amount (*e.g.* \$1 billion CAD) for some set period (*e.g.* one year).

183. CDOR determines the price and payments due under CDOR-based swaps by determining the amount paid or received by each party.

184. There are many different types of CDOR-based swaps. For example, in the most common “plain vanilla” interest rate swap, the parties agree to a “fixed-for-floating” exchange in which one party will make payments based on a variable price or rate, *e.g.*, CDOR, while the other will make payments based on a fixed rate, *e.g.*, 1.5%, for the same notional amount.

185. Counterparties may also use swaps to conduct a “floating-for-floating” exchange in which both parties agree to make payments based on a variable price or rate. For example, one party can agree to make payments equal to the return on a stock or index, *e.g.*, the S&P/Toronto Stock Exchange, an index of the largest companies on the Toronto Stock Exchange, in exchange for receiving interest rate payments based on a variable interest rate, like CDOR.

186. Payments under a swap contract are due at regular intervals for the duration of the agreement on certain specified “fixing” or “reset” dates. Each time a payment is due, the amount owed by the two parties are netted against each other so that only the party with the larger obligation will make a payment.

187. For example, assume Party A enters into a floating-for-floating swap contract with Party B and agrees to make payments every six months equal to the return rate of the S&P 500 Index. In exchange, Party B agrees to make payments to Party A based on the six-month CDOR tenor. On each reset date, if six-month CDOR is greater than the percentage return of the S&P 500 Index, Party B has the larger obligation and will make a payment to Party A. But if the S&P 500

Index returns more on a percentage basis than six month CDOR, Party A has the larger obligation and will make a payment to Party B.

3. CDOR-Based Forward Rate Agreements

188. A forward rate agreement (“FRA”) is an interest rate forward contract. FRAs, which are also known as single-period swaps, are similar to interest rate swaps and represent an agreement between two counterparties to exchange fixed-for-floating interest rate payments on some principal amount at a future reset date. On the reset date, the party with the larger obligation makes an interest rate payment equal to the difference between the fixed rate and floating rate specified in the contract. For example, assume Party A enters into an FRA with Party B in which Party A agrees to receive 4% interest on \$1,000,000 and Party B agrees to receive interest equal to three-month CDOR, determined on a single date one year in the future, for the same underlying principal amount. If, after one year, three-month CDOR is higher than 4%, Party A must pay Party B the difference in interest between 4% and the three-month CDOR fixing on that date. However, if three-month CDOR is lower than 4%, Party B must pay Party A the difference in interest. Thus, CDOR determines the price and payments due under a CDOR-based FRA.

4. Canadian Dollar Foreign Exchange Swaps & Forwards

189. The simplest form of foreign exchange transactions are “spot” transactions. Spot transactions are simply an agreement to exchange one currency (e.g., Canadian dollars) for another currency (e.g., U.S. dollars) at the current exchange rate.

190. The two currencies involved in a spot transaction are known as a “currency pair.” Each currency is identified by reference to its “ISO 4217” code, a three-letter abbreviation established by International Standards Organization. The ISO 4217 code for U.S. dollars is “USD;” the code for Canadian dollars is “CAD.” Members of a currency pair are separated by a slash such that a currency pair consisting of the U.S. dollar and Canadian dollar is represented as “USD/CAD.”

191. The first currency listed in each currency pair is called the “base” currency. The second is called the “term” or “counter” currency. Prices for each currency pair are quoted to the fourth decimal place (i.e., 0.0001), also known as a “pip” or “tick,” and reflect the amount of the term currency necessary to buy one unit of the base currency.

192. Spot transactions are completed immediately and typically “settle,” *i.e.*, payment is made and the currency purchased is delivered, within two business days. This quick turnaround makes spot transactions appropriate for short-term currency needs.

193. For transactions with longer timetables, investors will typically enter a foreign exchange (“FX”) forward. An FX forward, also known as a currency forward agreement, is a derivative that provides for the purchase or sale of one currency (e.g., CAD) in terms of another (e.g., USD) on some future date (e.g., 90 days from now), at a price agreed upon today.

194. The cost of buying or selling currency pursuant to an FX forward is derived from the current spot price of the relevant currency pair using an industry standard formula, which is displayed in Figure 3 below. This formula adjusts the spot price of the currency pair being traded to account for the interest costs and benefits associated with purchasing and carrying the currency pair over the duration of the agreement.

$$\text{Future Price} = \text{Spot Price} \times \left(\frac{1 + [\text{Rterm} \times (\text{d} / 360)]}{1 + [\text{Rbase} \times (\text{d} / 360)]} \right)$$

FIGURE 3

195. This interest rate adjustment is carried out using three variables: (a) “Rterm,” which represents the rate of interest charged to borrow the term currency; (b) “Rbase,” which represents

the rate of interest earned by depositing the base currency; and (c) the number of days until settlement, which is represented by the variable “d.”

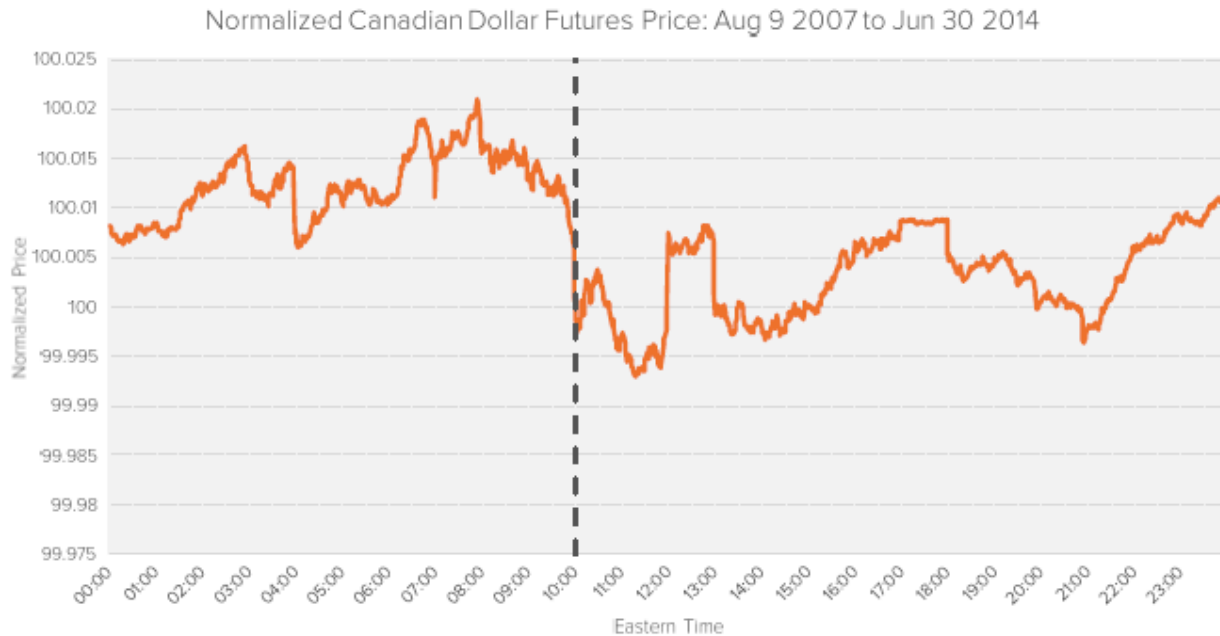
196. Derivatives traders in the United States and Canada use CDOR rates for the “Rterm” and “Rbase” components of this formula when pricing a Canadian dollar FX forward because CDOR is supposed to represent the current rate at which Canadian dollars are being offered in the North American market.

5. Canadian Dollar Futures Contracts

197. A CME Canadian dollar futures contract is an exchange-traded CDOR-based derivative that represents an agreement to buy (called a “long” position) or sell (called a “short” position) 100,000 Canadian dollars in terms of U.S. dollars on some future date.

198. CME Canadian dollar futures contracts are the exchange-traded equivalent of Canadian dollar FX forwards and are priced using the same formula.

199. Because CDOR is a component in the formula used to price CME Canadian dollar futures contracts, there is a statistically significant relationship between a change in CDOR and a change in the prices of CME Canadian dollar futures contracts. Plaintiff used a regression analysis to verify this relationship by comparing the daily change in: (1) the closing price of the CME Canadian dollar futures contracts closest to expiration; (2) the spot price of purchasing Canadian dollars in terms of U.S. dollars; and (3) the one, two, three, six, and twelve-month tenors of CDOR. This analysis showed a statistically significant relationship between a change in the one, three, and twelve-month tenors of CDOR and the prices of CME Canadian dollar futures contracts, indicating that CDOR directly impacts the price of those futures contracts.

**FIGURE 4**

200. CDOR's direct impact on CME Canadian dollars futures contracts is also demonstrated by an analysis of futures prices throughout the day. Figure 4 shows the normalized price of CME Canadian dollar futures contracts between 12:00 A.M. and 11:59 P.M. Eastern Standard Time during the Class Period. This chart shows that CME Canadian dollar futures prices consistently react to the publication of CDOR at 10:15 A.M. Eastern Standard Time, decreasing in advance of the fixing and increasing shortly thereafter as the market incorporates this new information into the contract price.

201. As CDOR Panel members and the largest CDOR-Based Derivatives dealers in the world, Defendants understood the direct, mathematical pricing relationships described above and that manipulation of the CDOR fixing would affect the prices of CDOR-Based Derivatives, including those they traded within the United States.

II. Defendants Had a Common Motive to Suppress CDOR to Benefit their Short Positions In CDOR-Based Derivatives.

202. Defendants had a common motive to suppress CDOR during the Class Period as their business shifted away from CDOR-based lending to sale of CDOR-Based Derivatives.

203. Prior to the start of the Class Period, Defendants actively issued CDOR-Based Loans. This resulted in Defendants holding large portfolios of BAs, FRNs, and other products where borrowers made interest payments based on CDOR.

204. Defendants' large loan portfolios created a net long exposure to CDOR prior to the Class Period when their profits increased with borrowers' interest payments tied to that rate.

205. Data released by the Bank of Canada shows that Defendants began substantially reducing their lending activity and the size of their CDOR-Based Loan portfolios in 2007.⁸⁵ These findings are confirmed by Defendants' own public statements. For example, in 2008, RBC reported that the size of its BA portfolio had shrunk by more than 98% over the last three years, from \$998 million in 2005 to just \$13 million by the end of 2008.⁸⁶ TD Bank similarly reported that the size of its FRN portfolio decreased by more than 40% in a single year between 2007 and 2008.⁸⁷

206. At the same time Defendants reduced their CDOR-based lending activity, they began heavily marketing and selling interest rate swaps, FRAs, and other CDOR-Based Derivatives to North American investors. A 2010 survey conducted by the Bank of Canada, for example, determined that average daily turnover in interest rate swaps by Canadian dealers more than tripled

⁸⁵ *Bank of Canada Liquidity Actions in Response to the Financial Market Turmoil*, BANK OF CANADA REVIEW, (Autumn 2009), available at <http://www.bankofcanada.ca/wp-content/uploads/2010/06/zorn.pdf>.

⁸⁶ *2008 Annual Report*, Royal Bank of Canada, at 141, available at http://www.rbc.com/investorrelations/pdf/ar_2008_e.pdf; *2007 Annual Report*, Royal Bank of Canada, at 127, available at http://www.rbc.com/investorrelations/pdf/ar_2007_e.pdf.

⁸⁷ *2008 Annual Report*, TD Bank Financial Group, at 105, available at <https://www.td.com/document/PDF/ar2008/td-ar2008-ar2008.pdf>.

from April 2007 to April 2010.⁸⁸ Likewise, RBC and TD Bank reported that they more than doubled their positions in CDOR-Based Derivatives, including swaps and FRAs, during 2007 and 2008.⁸⁹

207. Defendants grew their CDOR-Based Derivatives portfolios by aggressively marketing those products to North American corporations, hedge funds, public pension funds, and other investors that borrowed funds using FRNs or other floating rate loans. These loans obligated them to make interest rate payments based on CDOR, which can fluctuate over time.

208. Defendants promoted CDOR-Based Derivatives transactions to floating rate debt holders as a way to reduce risk and take advantage of low interest rates during the Class Period, swapping their floating rate obligations for fixed interest payments. Marketing materials published by Defendant TDSI, for example, sold interest rate swaps to customers in the United States as a way to “[a]llow your organization to convert its floating rate debt into an instrument that is effectively a fixed rate debt to protect against rising interest rates.”⁹⁰

209. Investors took advantage of this opportunity and a study from the Bank of Canada confirms that CDOR-Based Derivatives trading grew during the Class Period as a result of investors’ increased use of CDOR-based swaps, FRAs, and other products to lock in low fixed interest rates:

The use of interest rate swaps was higher in the 2008–10 period compared with the other two periods, because firms most likely wanted to lock in their lower cost of debt in the environment of low interest rates and somewhat elevated uncertainty about the outlook for the economy. With the expectation of an increase in interest rates, the reliance on interest rate swaps would allow firms to pay fixed interest rates

⁸⁸ *Survey of Activity in Foreign Exchange and Derivatives Markets in Canada During April 2010*, BANK OF CANADA, (Aug. 31, 2010) available at <http://www.bankofcanada.ca/wp-content/uploads/2010/09/pr010910.pdf>.

⁸⁹ See notes 82-83, above.

⁹⁰ *Interest Rate Derivatives*, TD SECURITIES, http://www.tdsecurities.com/tds/content/CMkt_InterestRateDerivatives?..=&language=en_CA&changeLanguage=Y.

while the underlying debt payment remains variable but hedged.⁹¹

210. These CDOR-Based Derivatives transactions left Defendants with the obligation to pay a substantial amount of interest based on CDOR. Every time a pension fund, hedge fund, or corporation entered an interest rate swap with a Defendant to exchange its obligation to make interest payments based on CDOR for a fixed interest rate, the Defendant on the other side of that transaction assumed the obligation to make interest payments equal to CDOR.

211. The increasingly high volume of swaps and other CDOR-Based Derivatives transactions entered by Defendants throughout the Class Period resulted in them becoming net payors of interest based on CDOR. Figure 5 below was created by the Bank of Canada. It shows the relative size of Defendants' positions in CDOR-Based Loans and Derivatives, including interest rate swaps, futures contracts, FRAs, basis swaps, FRNs, and BAs, as of January 2014:

Chart 1: Instruments referencing CDOR

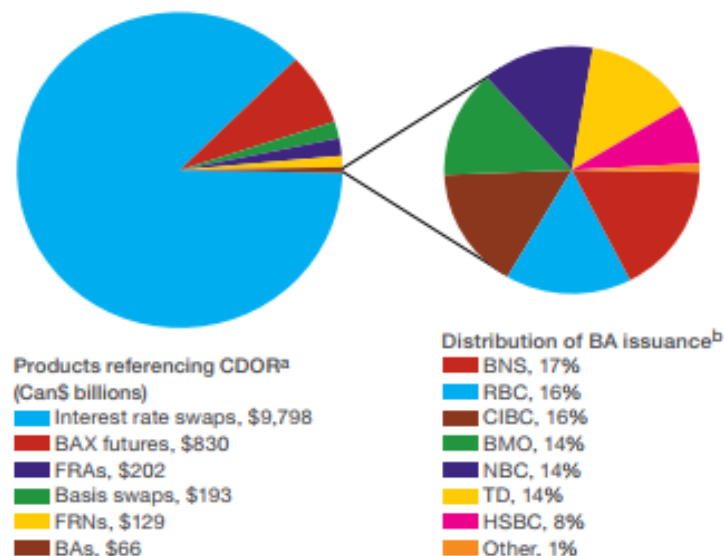


FIGURE 5⁹²

⁹¹ *The Use of Financial Derivatives by Canadian Firms*, BANK OF CANADA, Autumn 2014 Bank of Canada Rev. 49, available at <http://www.bankofcanada.ca/wp-content/uploads/2014/11/boc-review-autumn14-paligorova.pdf>.

⁹² *Reforming Financial Benchmarks: An International Perspective*, Bank of Canada, June 2014 Fin. Syst. Rev. 45, 51 (June 2014).

212. Figure 5 demonstrates that by 2014, Defendants BNS, RBC, NBC, TD Bank, CIBC, BMO, and HSBC Bank Canada, collectively known as the “Big 7”⁹³—held substantially more CDOR-Based Derivatives contracts, where they made interest payments, than CDOR-Based Loans, where they received interest. Specifically, these Defendants’ held a total net exposure to CDOR of \$10 trillion Canadian dollars through interest rate swaps and FRAs, more than 50 times larger than the amount of FRNs and BAs outstanding.

213. This imbalance created a common motive and financial incentive for Defendants to suppress CDOR and reduce the amount of interest they were required to pay investors in CDOR-based swaps and FRAs. As explained in ¶¶ 182-87 the value of an interest rate swap is represented by the difference between the fixed and floating payment streams. By artificially reducing the amount of interest due to investors under these CDOR-Based Derivatives contracts, Defendants increased the profitability of their swap and FRA positions. This manipulation harmed investors who received lower returns and less than they should have in their CDOR-Based Derivatives transactions.

III. Economic Evidence Demonstrates that Defendants Suppressed CDOR

A. CDOR was Suppressed as Compared to Adjusted CAD LIBOR

214. Defendants’ unlawful suppression of CDOR is evident when CDOR is compared to other Canadian dollar money market rates. For example, prior to being discontinued in 2013, the London Interbank Offered Rate for Canadian dollars (“CAD LIBOR”) measured the rate at which Canadian dollars were offered in the London money market.

⁹³ These banks control more than 93% of the total banking assets in Canada and are thus sometimes referred to as the “Big 7” Banks. *See* Part IV.D, below.

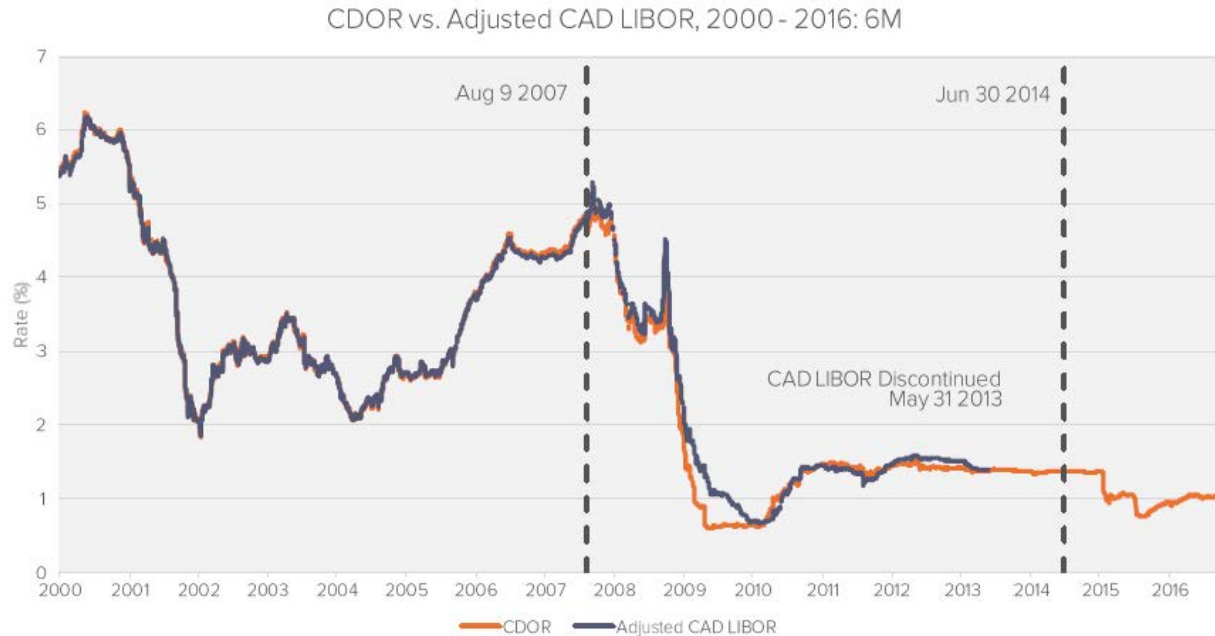
215. CAD LIBOR was calculated using a submission process similar to the CDOR fixing. Each trading day, a group of between nine and twelve CAD LIBOR panel banks, including Defendants BMO, BNS, CIBC, Deutsche Bank, HSBC, NBC, and RBC (collectively “CAD LIBOR Panel Banks”), submitted the rate at which other banks offered to lend Canadian dollars to them at various tenors using interbank deposits as of 11 A.M. London time.⁹⁴ Thomson Reuters then calculated CAD LIBOR for each tenor by averaging the middle 50% of submissions.

216. Multiple Defendants, including BMO, BNS, CIBC, Deutsche Bank, HSBC, NBC, and RBC, served on the CAD LIBOR and CDOR panel at the same time during the Class Period.

217. Plaintiff analyzed the relationship between CDOR and CAD LIBOR to identify days when CDOR was artificially suppressed. First, Plaintiff calculated an “Adjusted CAD LIBOR” by averaging the CAD LIBOR submissions of banks that also served on the CDOR panel.

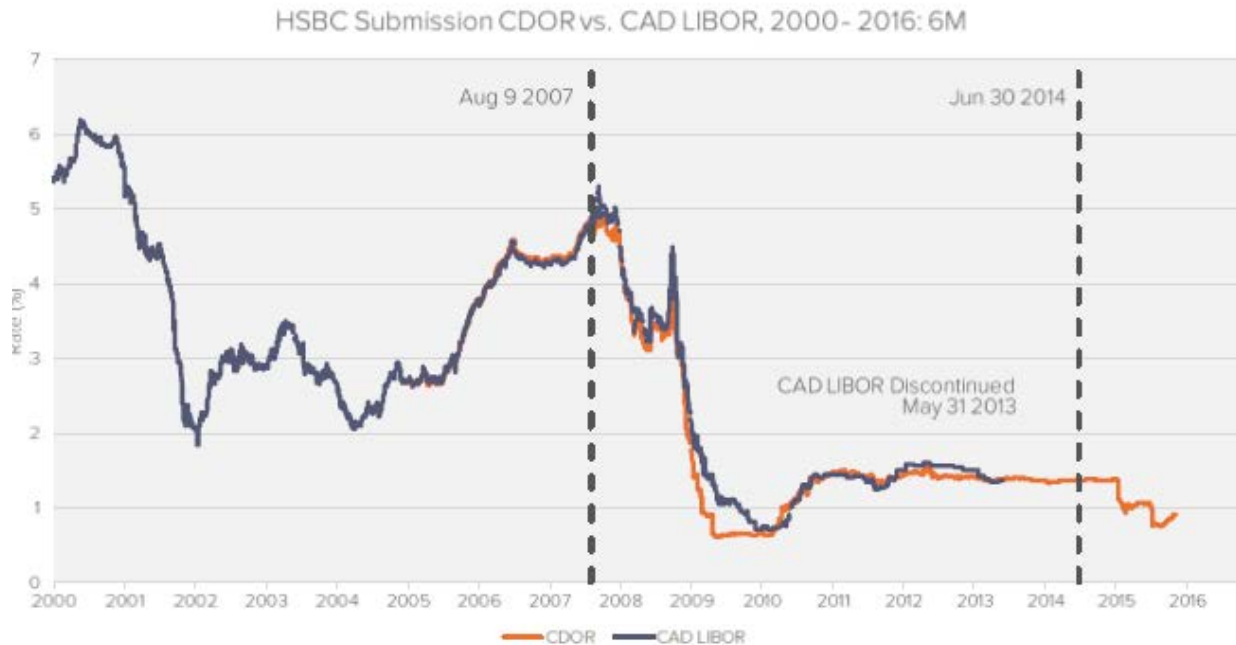
218. Next, Plaintiff compared Adjusted CAD LIBOR to CDOR by calculating the difference, *i.e.*, the “spread,” between these two rates on each day during the Class Period by subtracting CDOR from Adjusted CAD LIBOR. Absent manipulation, the spread between Adjusted CAD LIBOR and CDOR should be very small because both rates are based on submissions from Defendants regarding the rate of interest being offered on Canadian dollar loans for the same tenors. It should also tend to be negative as CDOR, the rate at which Defendants’ offer to *lend* Canadian dollars against BAs, should be higher than the rate at which those same Defendants report they are able to *borrow* Canadian Dollars, through Adjusted CAD LIBOR.

⁹⁴ The CAD LIBOR panel included 12 banks until May 2012, when it was reduced to 9.

**FIGURE 6**

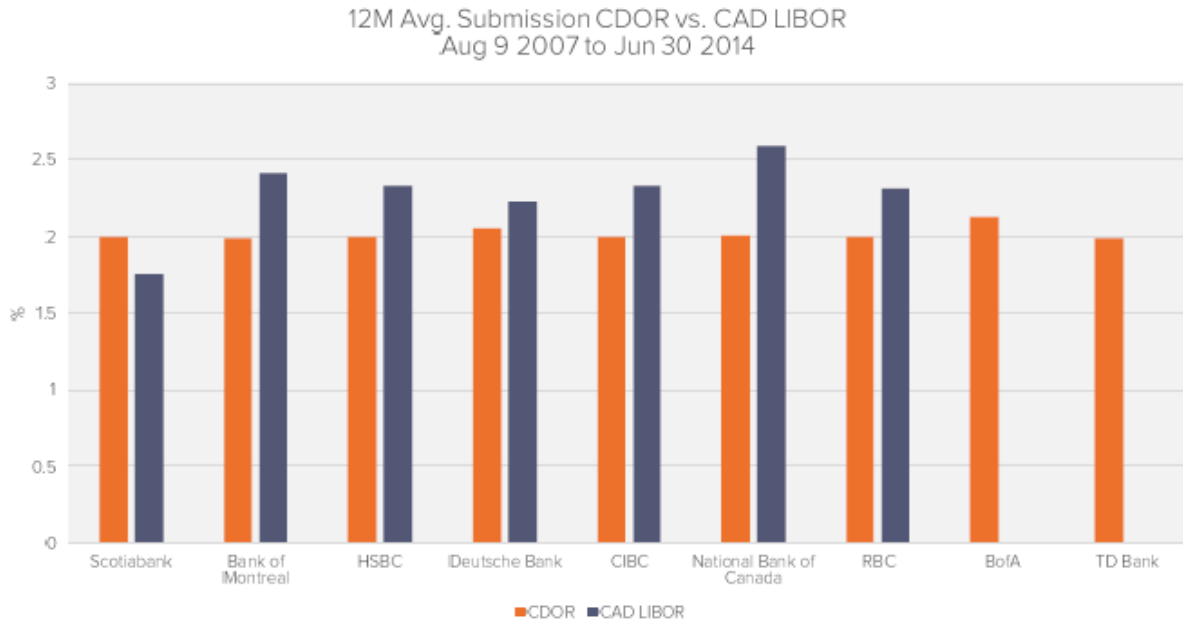
219. For example, Figure 6 displays the six-month tenor of CDOR and Adjusted CAD LIBOR between January 1, 2000 and December 31, 2016. This chart shows that between January 1, 2000 and August 8, 2007 (the “Pre-Class Period”), six-month CDOR tracked very closely with six-month Adjusted CAD LIBOR and exhibited a high degree of correlation. Further analysis confirmed a statistically significant relationship between six-month CDOR and six-month Adjusted CAD LIBOR during the Pre-Class Period.

220. This statistically significant relationship ended in August 2007 with the start of the Class Period. Figure 6 shows that six-month CDOR decreased substantially relative to Adjusted CAD LIBOR at that time. This continued throughout the Class Period, where six-month CDOR remained lower than six-month Adjusted CAD LIBOR by 30-50 basis points (*i.e.*, 0.3% to 0.5%), a difference 10 to 17 times larger than the average 3 basis point spread (0.03%) between those rates during the Pre-Class Period. Additional examples comparing CDOR to CAD LIBOR for other tenors are included in Appendix A.

**FIGURE 7**

221. Plaintiff also analyzed the individual submissions of Defendants that served on the CDOR and CAD LIBOR panels. For example, Figure 7 above displays Defendant HSBC's six-month CDOR submissions (the orange line) and six-month CAD LIBOR submissions (the purple line) between January 1, 2000 and December 31, 2015. Figure 7 shows that HSBC's six-month CDOR and CAD LIBOR submissions were almost identical during the Pre-Class Period. However, HSBC lowered its six-month CDOR submissions to significantly below its six-month CAD LIBOR submissions beginning in August 2007.

222. Additional charts comparing Defendants' CDOR submissions to their CAD LIBOR submissions for the same tenor are included in Appendix B. These charts show, consistent with Figure 7, that Defendants BMO, Deutsche Bank, CIBC, NBC, and RBC each lowered their six-month CDOR submissions at the same time as HSBC. Further indicating collusion, this same group of Defendants also made two-month, three-month, and twelve-month CDOR submissions below their CAD LIBOR submissions for the same tenor at the same time.

**FIGURE 8**

223. Defendants' CDOR submissions were consistently lower than their CAD LIBOR submissions throughout the Class Period. For example, Figure 8 compares Defendants' average twelve-month CDOR submissions to the average twelve-month CAD LIBOR submission between August 9, 2007 and June 30, 2014. Figure 8 shows that Defendants on the CDOR panel through the Class Period—*i.e.*, BMO, HSBC, Deutsche Bank, CIBC, NBC, and RBC—consistently submitted twelve-month CDOR rates that were, on average, lower than their twelve-month CAD LIBOR submissions. Figure 8 also demonstrates that the difference between Defendants' CDOR and CAD LIBOR submissions was substantial. NBC's CDOR submissions were, for example, 50 basis points (0.5%) lower on average than its twelve-month CAD LIBOR submissions.

224. The discrepancy between Defendants' individual CDOR and CAD LIBOR submissions cannot be explained by the start of the financial crisis or other macroeconomic factors. Because CDOR and CAD LIBOR both measure the rate at which Canadian dollars are being offered in the money market using submissions from the same Defendants, changes in liquidity, credit, or other factors should be reflected equally in Defendants' submissions to each rate. There is no reason why CDOR should be drastically different absent collusion.

225. Likewise, Defendants' individual CDOR submissions during the Class Period indicate collusion because they are against each Defendant's economic self-interest. By consistently making CDOR submissions lower than their CAD LIBOR submissions, Defendants represent to the market an uneconomic willingness to lend Canadian dollars for less than what it costs them to borrow those funds in the interbank market. This does not make economic sense as it would result in a loss on every loan transitions.

B. CDOR was Suppressed as Compared to the Canadian Prime Corporate Rate

226. Plaintiff also analyzed the relationship between CDOR and the Bank of Canada's Prime Corporate Paper Rate. The Prime Corporate Paper Rate measures the cost for corporations with the highest credit rating, *i.e.*, the lowest risk, to borrow Canadian dollars on an unsecured basis for between one and three months. Significantly, the Prime Corporate Paper Rate is based on actual commercial paper transactions in the Canadian money market, not submissions from Defendants.

227. The Prime Corporate Paper Rate should closely track CDOR absent manipulation because the cost of *borrowing* Canadian dollars through commercial paper transactions should be very close to the rate at which Defendants offer to *lend* Canadian dollars (in many instances to the same corporations) against BAs.

228. Figure 9 below displays the spread between three-month CDOR and the three-month Prime Corporate Paper Rate between January 1, 2000 and December 31, 2014. This chart shows that prior to the start of the Class Period, the spread between three-month CDOR and the three-month Prime Corporate Paper Rate remained consistent and relatively minimal, averaging one basis point (0.01%), with a maximum of value of 15 basis points (0.15%) in September 2002 and a minimum value of negative 10 basis points (0.10%) in February 2004.

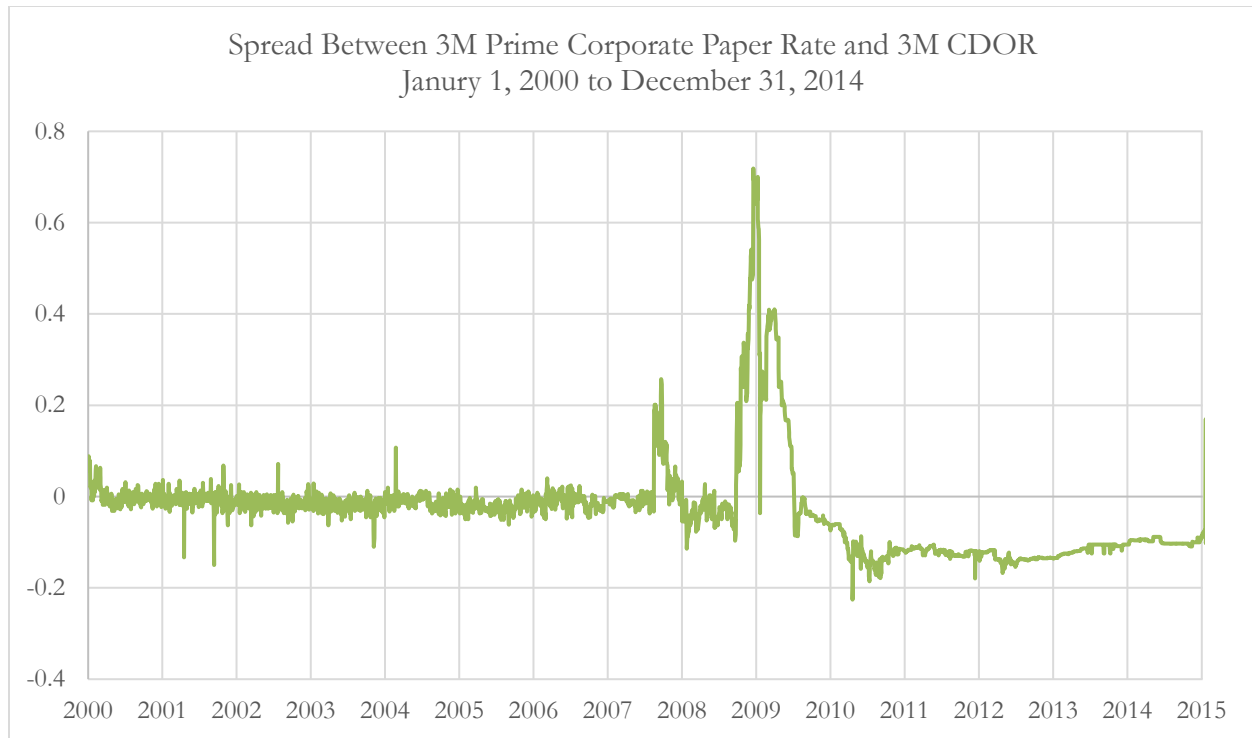


FIGURE 9

229. However, CDOR decreases dramatically at the start of the Class Period, falling more than 25 basis points (0.25%) below the three-month Prime Commercial Paper Rate by September 2007. An even larger decrease is visible later in the Class Period when CDOR falls more than 71 basis points (0.71%) below the three-month Prime Commercial Paper Rate in January 2009.

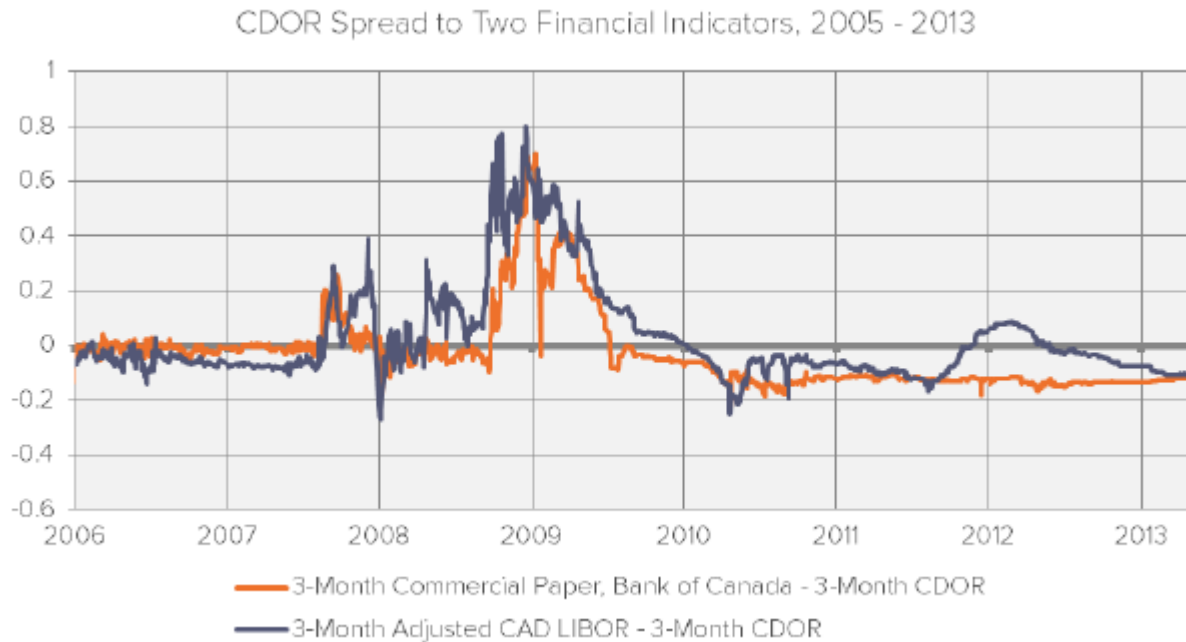


FIGURE 10

230. When compared to Adjusted CAD LIBOR, CDOR exhibited the same drastic change in spread at the same times during the Class Period. Figure 10 above shows the spread between three-month CDOR and both the three-month Prime Corporate Paper Rate (the orange line) and three-month Adjusted CAD LIBOR (the purple line). For example, CDOR decreases during August 2007 with the same magnitude and intensity in relation to both the Prime Corporate Paper Rate and Adjusted CAD LIBOR. The same change is visible in late 2008, when CDOR begins to drop significantly compared to the Prime Corporate Paper Rate and Adjusted CAD LIBOR.

231. CDOR's abnormally large decline relative to Adjusted CAD LIBOR and the Prime Corporate Paper Rate during the Class Period is indicative of collusion in the CDOR rate-setting process. Such changes cannot be explained by macroeconomic factors, like the financial crisis, because global events would affect all three rates in the same way. Moreover, CDOR's deviation from both Adjusted CAD LIBOR and the Prime Corporate Paper Rate at the same time, with same magnitude, same intensity, and in the same direction (*i.e.*, lower) demonstrates that CDOR was artificial and not reflective of the true rate at which Defendants offered Canadian dollars.

IV. Defendants Conspired to Suppress CDOR During the Class Period.

A. Defendants Coordinated False CDOR Submissions.

232. The nature of the CDOR fixing required Defendants conspire to manipulate its results. As described in Part I.C above, CDOR is a trimmed average calculated by Thomson Reuters after removing the highest and lowest Defendants submissions. This “topping and tailing” procedure significantly reduces the impact of individual outlier submissions by excluding them from the CDOR calculation. As a result, a single bank could not have unilaterally manipulated CDOR to the levels that existed during the Class Period.

233. Defendants maximized their manipulative impact on the CDOR fixing by coordinating artificially lower submissions as a group. An analysis of individual CDOR submissions shows that Defendants submitted identical rates with an extremely high frequency over extended periods of time during the Class Period. For example, between June 2013 and June 2014 (the last year of the Class Period) Defendants HSBC, RBC, CIBC, and NBC made identical three-month CDOR submissions more than 96% of the time. This included a 151-day stretch where these same Defendants made the same three-month CDOR submission every single day.

234. Further indicating collusion, Defendant BNS made three-month CDOR submissions that were *exactly* one basis (0.01%) point below the identical submissions of these four Defendants on 209 days, coinciding with the same time-period between June 2013 and June 2014.

235. Despite submitting rates inconsistent with economic realities, Defendants’ CDOR submissions during the Class Period remained consistently clustered with one another in an extremely narrow range. For example, from October 23, 2013 through December 30, 2013, there were 46 CDOR fixings. On those 46 days, the difference between the highest and lowest six-month CDOR submission was always less than three basis points (0.03%).

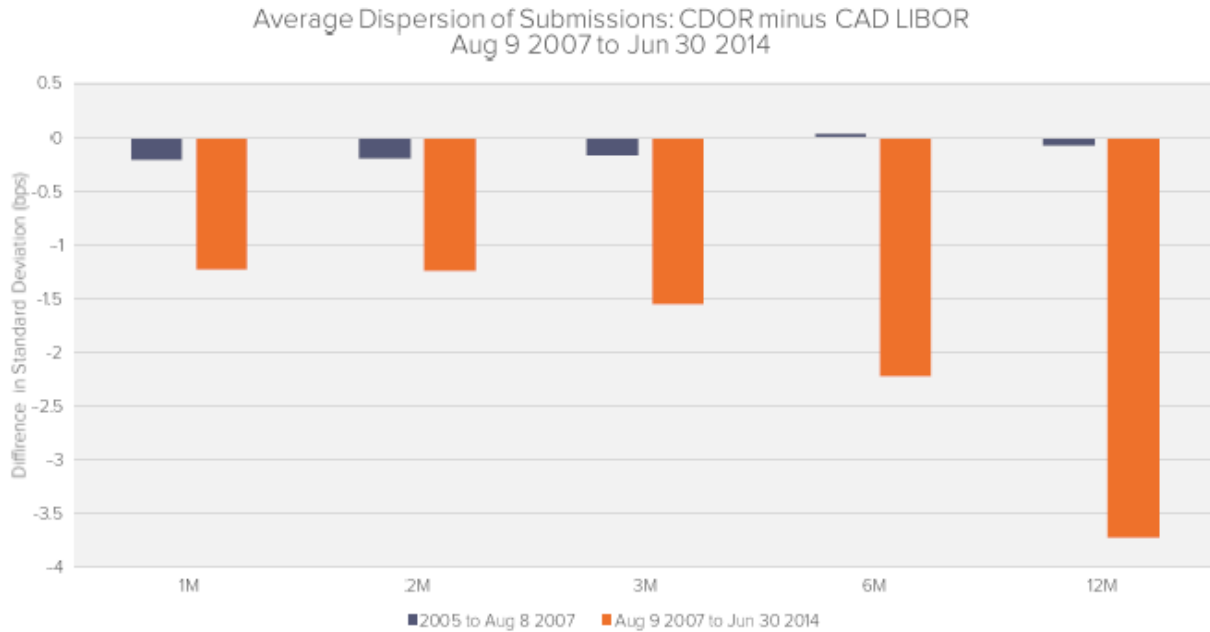


FIGURE 11

236. As a result, Defendants' CDOR submissions exhibit a lack of variability during the Class Period that is indicative of collusion. For example, Figure 11 compares the difference in the average amount of dispersion among Defendants' CDOR submissions and their CAD LIBOR submissions for the same tenors. A lower amount of dispersion means that Defendants' submissions are grouped closer together, while higher levels of dispersion represent a wider range.

237. Figure 11 shows that during the Pre-Class Period, from January 1, 2005 through August 8, 2007, Defendants' CDOR and CAD LIBOR submissions exhibit about the same amount of dispersion, with the difference (the purple bars) being close to zero.

238. This changes during the Class Period when Figure 11 shows that Defendants' CDOR submissions exhibit significantly less dispersion compared to their CAD LIBOR submissions for the same tenor. In contrast to the Pre-Class Period, the difference in dispersion between CDOR and CAD LIBOR during the Class Period (the orange bars) is significantly negative. This represents a lack of variability among Defendants' CDOR submissions, as in ¶¶ 234-35, above.

239. The high frequency of identical CDOR submissions and lack of variability among Defendants' rate quotes described above is indicative of collusion. Even if contributing banks always responded similarly to market conditions, the odds against CDOR panel members unilaterally making identical submissions, or submissions consistently within such a narrow range of each other, are astronomical. Yet, this happened on hundreds of days during the Class Period.

240. At the same time, the lack of dispersion among Defendants' CDOR submissions was inconsistent with material differences in their credit profiles. As explained in Part I.C above, CDOR is supposed to reflect the rate at which Defendants offer to lend Canadian dollars against BAs. Each CDOR Panel Defendant's submissions therefore should reflect their credit rating and access to funds, with banks that have poor credit and a hard time borrowing Canadian dollars only willing to lend to others at higher rates.

241. Plaintiff evaluated Defendants' credit risk using twelve-month Credit Default Swap ("CDS") spreads. A CDS is like a tradeable insurance contract. The buyer makes periodic payments to the seller in return for a payoff if the reference entity (*i.e.*, the company identified in the contract) experiences a credit event, such as a ratings downgrade. Higher CDS spreads indicate a greater risk that a credit event will occur for the reference entity.

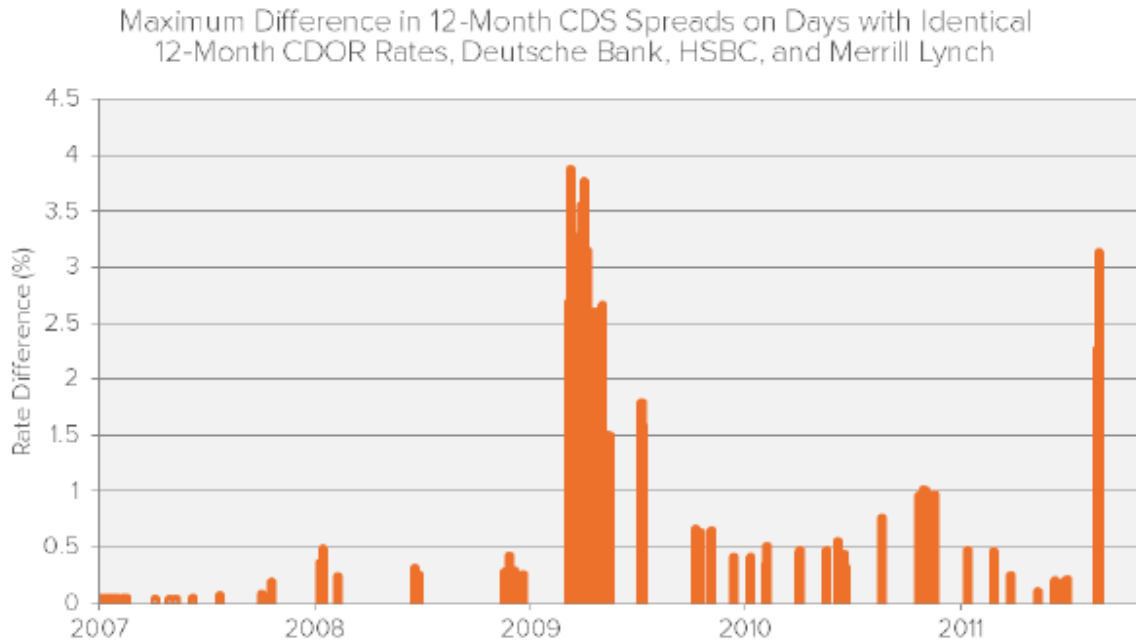


FIGURE 12

242. Figure 12 displays a comparison of twelve-month CDS spreads for Deutsche Bank, HSBC, and Merrill Lynch (the only CDOR Panel Defendants for which CDS spreads are available) on days when those Defendants made identical twelve-month CDOR submissions. This chart shows significant variation, between 50 and 400 basis points (0.5% to 4.0%), among twelve-month CDS spreads for these Defendants on days when they submitted the same twelve-month CDOR rate.

243. Such a wide variance in CDS spreads indicates that Defendants identical CDOR submissions were artificial and reflect collusion. If submitted honestly, each Defendants' twelve-month CDOR rate should be consistent with its credit risk ability to borrow Canadian dollars for twelve-months. Deutsche Bank's, HSBC's, and Merrill Lynch's CDS spreads demonstrate the significant differences in the risk associated with each bank, thus their CDOR submissions should reflect those differences and not have been identical.

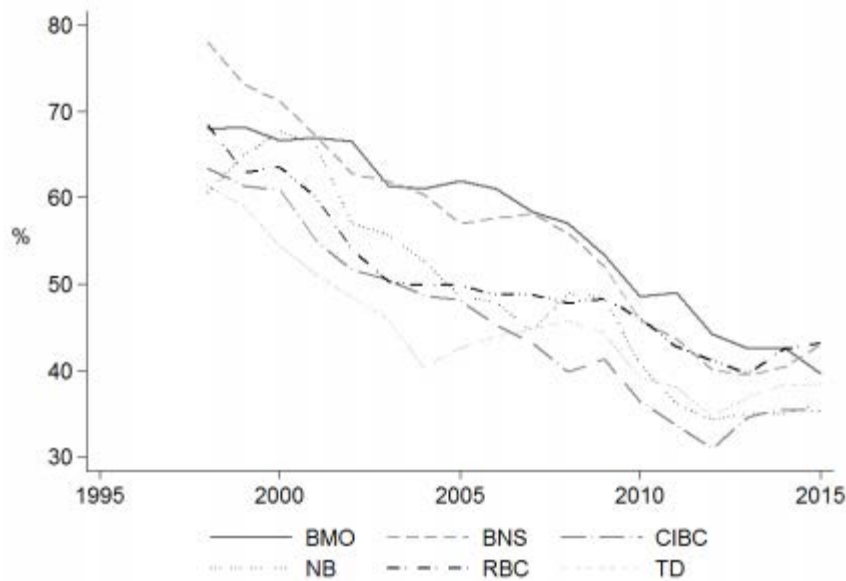


FIGURE 13⁹⁵

245. Balance sheet data for the “Big 6” Defendants similarly shows that their CDOR submissions did not accurately reflect their respective credit risk. Banks in Canada, like those in other countries that follow the Basel Committee on Banking Supervision, are required to periodically report the value of their assets adjusted to account for risk.⁹⁶ The total amount of “Risk-Weighted Assets” (“RWAs”) held by each bank represents its credit risk and is used to determine the appropriate amount of capital reserves necessary to avoid financial disaster.

246. Figure 13 above shows that the Big 6 Defendants maintained materially different amounts of RWAs during the Class Period, reflecting different credit profiles. The lack of variation and high frequency of identical CDOR submissions among these same Defendants is inconsistent with the differences in their credit profiles, indicating those submission were artificial.

⁹⁵ See e.g., Robert J. McKeown, *An Overview of the Canadian Banking System: 1996 to 2015*, Queen’s Economics Department Working Paper No. 1379, at 54 Fig. 21 (Apr. 17, 2017), available at http://qed.econ.queensu.ca/working_papers/papers/qed_wp_1379.pdf.

⁹⁶ *Id.*

247. Ratings from agencies such as S&P further confirm that the Defendants possessed materially different credit profiles. For example, S&P's debt rating for BNS, TD Bank, HSBC Canada, and RBC were consistently lower than its ratings for BMO and CIBC throughout the Class Period. Despite the material differences in the riskiness of each Defendant's financial assets, each bank continued to submit identical CDOR rates for long stretches during the Class Period.

248. Together, this data indicates that Defendants failed to independently determine their CDOR submissions, which should have varied based on each CDOR Panel Dealer's credit profile.

B. Deutsche Bank's Reaction to Regulatory Sanctions for Manipulating Numerous Benchmark Demonstrates the Existence of a Conspiracy

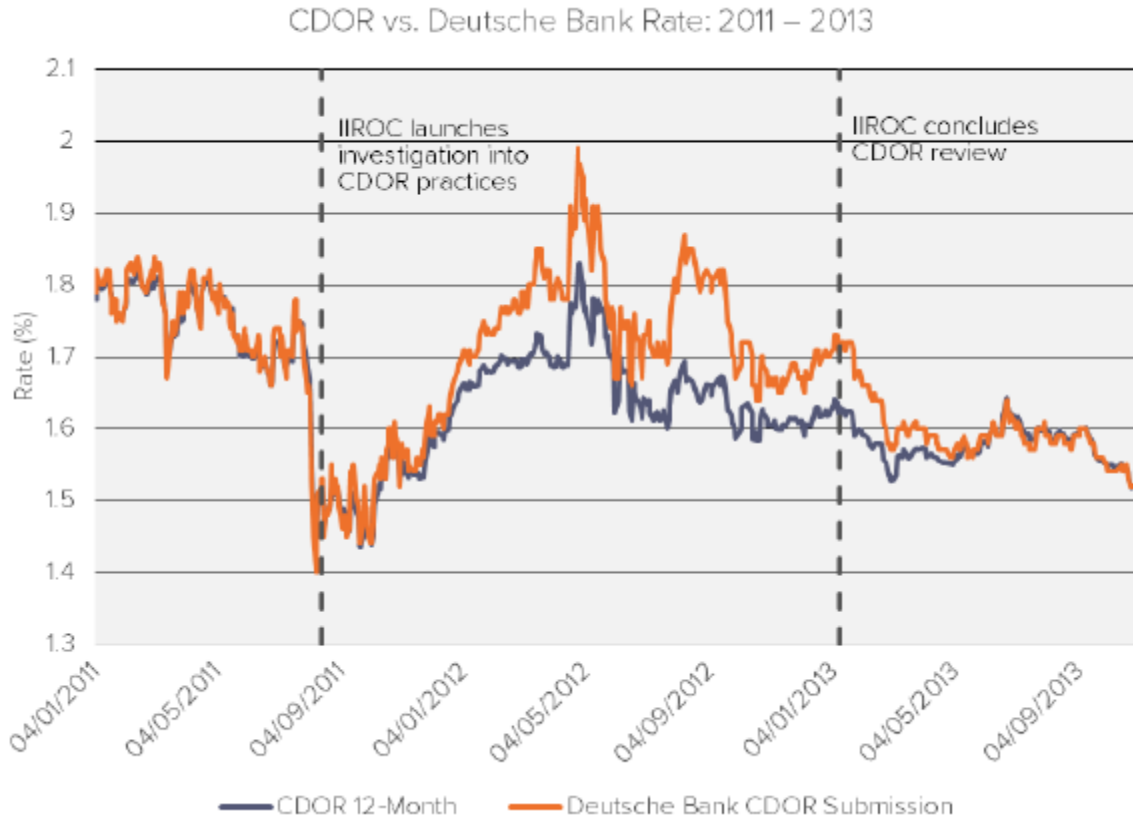
249. Before mid-2011, Deutsche Bank joined Defendants' cartel by submitting lower CDOR rates identical to other cartel members. As explained in Part IV.A above, Deutsche Bank's CDS spreads indicate they were making artificial submissions because an accurate representation of its credit risk required higher CDOR rates.

250. Beginning in 2011, regulators learned that Deutsche Bank conspired to manipulate numerous benchmark rates for various currencies. Deutsche Bank pleaded guilty to these allegations in April 2015 and agreed to pay fines totaling more than \$2 billion.⁹⁷

251. An analysis of Deutsche Bank's CDOR submissions showed a material change around the same time it began drawing regulatory scrutiny. In mid-2011, when Canadian regulator IIROC announced that it was initiating a review of the CDOR rate-setting process, Deutsche Bank's CDOR submissions suddenly and temporarily departed from the suppression scheme.⁹⁸

⁹⁷ Kristin Ridley & Karen Freifield, Reuters, *Deutsche Bank fined record \$2.5 billion over rate rigging* (2015), available at <https://www.reuters.com/article/us-deutschebank-libor-settlement/deutsche-bank-fined-record-2-5-billion-over-rate-rigging-idUSKBN0NE12U20150423>.

⁹⁸ IIROC stated that its review "was not an investigation into potential wrongdoing or manipulation of CDOR" but was for the purpose of "further explor[ing] current practices related to the calculation, supervision, and use of CDOR."

**FIGURE 14**

252. Figure 14 compares Deutsche Bank's twelve-month CDOR submissions to the twelve-month CDOR fix between 2011 and 2013. This chart shows that, following IIROC's announcement in August 2011, Deutsche Bank began deviating from its co-conspirators, making CDOR submissions that were consistently higher than the other CDOR Panel Defendants. Significantly, Deutsche Bank's CDOR submissions return to the artificially lower level of the rest of the CDOR Panel Defendants *after* IIROC closed its review in 2013.

253. The timing of these changes in Deutsche Bank's CDOR submissions indicate that it temporarily exited the agreement to suppress CDOR to avoid fines or sanctions by IIROC in reaction to the regulatory penalties received from its manipulation of other interest rate benchmarks.

254. Tellingly, Deutsche Bank withdrew from the CDOR Panel entirely in January 2014, after the OSFI announced it would take regulatory control of the CDOR submission process.

C. Defendants Encouraged CDOR Manipulation by Placing Derivatives Traders in Charge of Submitting CDOR Rates

255. During its review of the CDOR rate-setting process, IIROC determined that the CDOR Panel Defendants failed to implement basic controls to ensure that CDOR submissions were made honestly and independently.⁹⁹

256. For example, IIROC found that multiple CDOR Panel Defendants failed to take the basic step of implementing an information barrier between derivatives traders who stood to profit from changes in CDOR and employees responsible for making CDOR submissions.

257. This created a conflict of interest between Defendants' CDOR-Based Derivatives traders—who received as much as half of their compensation based on the amount of revenue they generated from trading positions—and the CDOR submitters who were supposed to make honest CDOR submissions that reflected actual market lending rates.¹⁰⁰

258. Alarming, the CDOR Panel Defendants further encouraged manipulation by placing CDOR-Based Derivatives traders in charge of determining their CDOR submissions. These trader-submitters actively transacted in the CDOR-Based Derivatives market and thus had a financial incentive and means to conspire and manipulate CDOR for Defendants' benefit.¹⁰¹

259. Defendants also failed to implement any guidelines, code of conduct, or a conflict of interest policy governing the CDOR submission process. Significantly, this meant that Defendants never prohibited traders or submitters from colluding when determining CDOR or submitting false rates intended to manipulate CDOR.

⁹⁹ *Canadian Dollar Offered Rate Code of Conduct*, IIROC, (Jun. 2, 2014), available at <http://docs.iiroc.ca/DisplayDocument.aspx?DocumentID=D2D9A8334FA6414AA79CD1FC3C252966&Language=en>.

¹⁰⁰ *Professional Trader*, Canadian Securities Institute, (last visited Dec. 5, 2017), available at https://www.csi.ca/student/en_ca/career/trading/pt.xhtml?lang=en_ca.

¹⁰¹ *Id.* at 2, 9.

260. When the IIROC published the CDOR Code of Conduct in June 2014, it included “new” proscriptions on the following practices:

Improper Market Conduct

8.2 Each Submitting Bank agrees that any conduct involving the submission of Bids that is intentionally manipulative (or an attempt thereof), collusive or involves anti-competitive discussions and/or agreements with competitors, including other Submitting Banks, is strictly prohibited.

...

Conflicts of Interest

9.2 In meeting the standard required under Section 9.1, each Submitting Bank shall consider to what extent any restrictions may be required with respect to the following:

9.2.1. the proximity of the Submitter to other employees that routinely trade in derivatives and other financial products that are sensitive to CDOR;

9.2.2. the supervision or management by the Submitter of traders that routinely trade in derivatives and other financial products that are sensitive to CDOR;

9.2.3. trading by the Submitter in derivatives and other financial products that are sensitive to CDOR; and

9.2.4. the compensation of the Submitter with respect to trading in derivatives and other financial products that are sensitive to CDOR.¹⁰²

261. These practices should have been prohibited prior to June 2014. For example, the head of the Canadian Bond Investors’ Association noted:

Our final comment is on paragraph 8.2 of the Code of Conduct. Our understanding is that all of the actions listed in this paragraph are currently illegal. We find it curious that it needs to be highlighted that these actions are also “strictly prohibited.”

¹⁰² *Canadian Dollar Offered Rate Code of Conduct*, IIROC, (Jun. 2, 2014), available at <http://docs.iiroc.ca/DisplayDocument.aspx?DocumentID=D2D9A8334FA6414AA79CD1FC3C252966&Language=en>.

D. The Structure of CDOR and the CDOR-Based Derivatives Market Was Susceptible to Defendants' Profit-Driven Conspiracy.

262. Collectively, the Big 6 Banks control roughly 93% of total bank assets in Canada.

With the addition of HSBC Bank Canada (the largest non-Canadian bank operating in Canada) the percentage of the market controlled by these “Big 7” banks is even greater.

263. Defendants' dominance also extends to the BA market, where they issue more than 99% of all BAs in Canada.

264. This is an extremely high degree of concentration. For comparison, the five largest American banks (*i.e.* JPMorgan Chase, Bank of America, Citigroup, Wells Fargo, and Goldman Sachs) control only 44% of total bank assets in the United States.

265. Defendants regularly met in person throughout the Class Period at industry conferences, including the National Bank Canadian Financial Services Conference in Montreal in March of 2008, RBC Capital Markets' Canadian Bank CEO Conference in Toronto in January of 2008, and CIBC World Markets 8th Annual Eastern Institutional Investor Conference in Montreal in September of 2009.

266. These meetings included top-level executives responsible for directing policy for the Defendants. For example, Tom Flynn, Executive Vice President and Chief Risk Officer for Defendant BMO Financial Group, George Lewis, Group Head of Wealth Management for Defendant Royal Bank of Canada, and Tim Hockey, Group Head of Canadian Banking for Defendant TD Bank Financial Group, each attended Defendant CIBC's World Markets Institutional Investor Conference in Montreal in September of 2008.

267. Defendants also routinely met to discuss derivatives trading and policy through various trade associations. For example, the Canadian Capital Markets Association (CCMA), is a trade group that Defendants belong to whose stated as purpose is “[t]o enhance the competitiveness of Canada's capital markets through a forum of industry experts who provide leadership and

direction to the investment community.” The CCMA is comprised of five committees who meet monthly to “provide leadership to initiatives that are important to the Canadian capital markets.” Defendants have a strong presence on these committees, employing a total of 99 members.

268. Defendants also belonged to the Canadian Foreign Exchange Committee (“CFEC”). CFEC included executives from each CDOR Panel Defendant. Significantly, these executives constituted a majority of CFEC positions.

269. Many of Defendants’ executive officers on the CFEC previously worked for other co-conspirators. For example, Barry Wainstein, a CFEC committee member and Global Head of Foreign Exchange at BNS, was previously a managing director at CIBC and also worked for Bank of America Merrill Lynch in both Toronto and New York. Similarly, Harry Culham, the group head for CIBC Capital Markets, was previously a managing director and Global Head of Foreign Exchange Trading for Bank of America Merrill Lynch. Jason Henderson, the Head of Global Banking and Markets for HSBC Bank Canada, was previously a managing director of foreign exchange derivatives for RBC Capital Markets.

270. Defendants also dominated the CFEC subcommittees. Three of the four spots on the CFEC’s Membership Subcommittee were occupied by representatives from a Defendant. This subcommittee was responsible for adding new members, extending memberships, and assigning responsibilities within the CFEC. Defendants also held seven of the ten positions on the Operations Managers Working Group subcommittee.

271. Defendants used their domination of the CFEC to keep discussions secret. For example, the CFEC committee determined that it would not report discussions on “foreign exchange, financial, and economic developments” in the minutes.¹⁰³

¹⁰³ Minutes of the Canadian Foreign Exchange Committee Meeting #81, 81.2, (May 9, 2013), available at <http://www.cfec.ca/files/minutes81.pdf>.

272. The CFEC sponsored the Canadian Committee for Professionalism (“CCFP”) which was responsible for promoting “a high standard of professionalism and ethical conduct in the Canadian FX market.”¹⁰⁴ However, in 2013 CFEC member Ed Monaghan of RBC Capital Markets moved to have the CCFP disbanded for failure to achieve its objectives and inactivity. CFEC member Jason Henderson of HSBC Bank Canada (who was formerly a colleague of Monaghan at RBC) seconded the motion and the CCFP was disbanded.

273. A high level of employee movement occurred within and among Defendants during the Class Period. For example, Defendant BMO Financial Capital Markets hired Amit Gandhi in 2013 as a Senior Manager, Head of Fixed Income Settlements & Global Payments in 2013. Gandhi previously worked as a manager of Global Fixed Income Operations at Defendant at TD Securities.

274. This high degree of employee movement among the Defendants extended to senior executive levels. For example, Kelsey Gunderson is BMO’s Global Head of Trading Products, where he is responsible for the firm’s fixed income, currency, & commodities business. This business unit trades CDOR-based interest rate and FX derivatives. Gunderson previously worked for CIBC prior to joining BMO.¹⁰⁵

275. The high degree of market control by the Defendants, the high frequency of interfirm communications, and the high degree of turnover within the Canadian financial industry has led observers to describe it as a market where “everyone knows everyone”.¹⁰⁶

¹⁰⁴ *Report on Activities 2012*, CAN. FOREIGN EXCH. COMM., available at http://www.cfec.ca/files/annualreport12_e.pdf.

¹⁰⁵ *Kelsey Gunderson, Global Head of Trading Products*, BMO Capital Markets, (last visited Dec. 11, 2017) available at <http://www.bmocm.com/about-us/bios/kelsey-gunderson/>.

¹⁰⁶ *Canada: Financial Sector Assessment Program -- Intensity and Effectiveness of Federal Bank Supervision in Canada -- Technical Note*, International Monetary Fund, at 17 (Mar. 2014), available at <https://www.imf.org/external/pubs/ft/scr/2014/cr1470.pdf>.

E. Defendants Engaged in a Pattern of Collusion and Price-fixing to Boost Trading Profits During the Class Period

276. Regulators across the globe have imposed massive fines and sanctions against several of the Defendants. The government findings and settlements demonstrate that Defendants developed a practice of colluding to manipulate benchmarks in their favor. These Defendants include Deutsche Bank, Bank of America Merrill Lynch, HSBC, and RBC.

1. Deutsche Bank

277. In 2015, Deutsche Bank entered settlements with multiple government regulators, including the Department of Justice (“DOJ”), Commodity Futures Trading Commission (“CFTC”), European Commission (“EC”), and New York State Department of Financial Services (“NYSDFS”), paying more than \$3.386 billion in fines and penalties to settle charges related to its participation in a conspiracy to manipulate multiple benchmark rates during the Class Period.

278. Specifically, Deutsche Bank admitted to the DOJ that from at least 2003 through 2011 it manipulated LIBOR for several currencies, including U.S. Dollar LIBOR, Yen LIBOR and Swiss franc LIBOR, as well as Euribor (the LIBOR equivalent for the Euro money market).

279. Deutsche Bank’s misconduct was pervasive driven by traders, submitters, and managers in its Global Finance and Foreign Exchange business unit (“GFFX”) located around the world, including in New York, London, and Frankfurt. These traders, responsible for both determining Deutsche Bank’s LIBOR or Euribor submissions and trading derivatives, frequently made or requested false submissions to increase the profitability of those derivatives positions.

280. Deutsche Bank management coordinated and organized manipulative conduct among traders and submitters, including those in New York, during weekly “Monday Risk Calls.” Traders in the United States joined these weekly conference calls, set up to plan false submissions and corresponding trading strategies across bank divisions and locations to maximize profits.

281. The CFTC also found that Deutsche Bank conspired to manipulate at least six separate benchmark interest rates for years during the Class Period.¹⁰⁷ Specifically, the CFTC found that from 2005 through 2011 Deutsche Bank engaged in “systemic and pervasive misconduct directed at manipulating critical, international financial benchmark rates” such as Yen LIBOR, Sterling LIBOR, Swiss Franc LIBOR, U.S. Dollar LIBOR, TIBOR,¹⁰⁸ and Euribor.¹⁰⁹ Among other practices, Deutsche Bank encouraged manipulation by placing derivatives traders with “obvious conflicts of interest” in charge of submitting benchmark rates.¹¹⁰ These derivatives traders aligned trading positions with conspirators at other banks, ensuring that the cartel would benefit by manipulating these benchmark rates.¹¹¹ With respect to Deutsche Bank’s admitted role in the conspiracy to manipulate Euribor, Deutsche Bank’s “star trader” was particularly successful because he leveraged “friendships and past working relationships with derivatives traders at other Euribor panel banks to further his attempts to manipulate Euribor.”¹¹²

282. Deutsche Bank frequently conspired with was HSBC. The EC specifically identified HSBC as a member of the “Euro Interest Rate Derivatives Cartel” formed by Deutsche Bank and six other major banks to fix the prices of Euro interest rate derivatives.¹¹³

¹⁰⁷ *Order Instituting Proceedings Pursuant to Sections 6(C) and 6(D) of the Commodity Exchange Act, Making Findings, and Imposing Remedial Sanctions*, CFTC Docket No. 15-20, (Apr. 23, 2015).

¹⁰⁸ TIBOR is the Tokyo Interbank Offering Rate and is used to price certain derivatives traded in the Asian financial markets.

¹⁰⁹ *Order Instituting Proceedings Pursuant to Sections 6(C) and 6(D) of the Commodity Exchange Act, Making Findings, and Imposing Remedial Sanctions*, CFTC Docket No. 15-20, (Apr. 23, 2015).

¹¹⁰ Press Release, CFTC, Deutsche Bank to Pay \$800 Million Penalty to Settle CFTC Charges of Manipulation, Attempted Manipulation, and False Reporting of LIBOR and Euribor (Apr. 23, 2015), available at <http://www.cftc.gov/PressRoom/PressReleases/pr7159-15>.

¹¹¹ *Id.* at 26.

¹¹² *Id.* at 20.

¹¹³ http://europa.eu/rapid/press-release_IP-16-4304_en.htm

283. Deutsche Bank's admitted participation in the LIBOR manipulation conspiracy extended to supervisors and managers who coordinated LIBOR submissions with other banks, including Bank of America. For instance, the Deutsche Bank supervisor in charge of LIBOR submissions coordinated artificially low submissions with Bank of America on multiple occasions.¹¹⁴

284. In October 2017, Deutsche Bank paid \$220 million to settle with 45 states for conspiring to manipulate benchmark interest rates to benefit its trading positions.¹¹⁵ The Settlement Agreement details how Deutsche Bank reaped "unprecedented" trading profits by manipulating various LIBOR rates to benefit trading positions, including by routinely coordinating false submissions with other members of the LIBOR panel and encouraging derivatives traders to influence LIBOR submissions.¹¹⁶ This conduct occurred from at least 2005 through 2010.

285. Additionally, The Federal Reserve fined Deutsche Bank \$136.95 million for its collusive manipulation of the WM/Reuters spot foreign exchange benchmarks. It found that Deutsche Bank conspired through "disclosures of trading positions and, on some occasions, discussions of coordinated trading strategies with traders of other institutions" and "discussions about possible FX benchmark fix-related trading with traders of other institutions."¹¹⁷ In 2017, Deutsche Bank agreed to pay \$190 million to settle a civil class of investors harmed by the

¹¹⁴ *Settlement Agreement dated October 25, 2017*, 8-9, available at https://ag.ny.gov/sites/default/files/db_settlement_agreement_signed.pdf

¹¹⁵ *Id.*

¹¹⁶ *Id.* at 8-9.

¹¹⁷ *In the Matter of Deutsche Bank AG, DB USA Corporation, and Deutsche Bank AG New York Branch*, Order to Cease and Desist and Order of Assessment of a Civil Money Penalty Issued Upon Consent Pursuant to the Federal Deposit Insurance Act, as Amended (Apr. 20, 2017), available at <https://www.federalreserve.gov/newsevents/pressreleases/files/enf20170420a1.pdf>.

conspiracy to manipulate the same rates.¹¹⁸ Defendants Royal Bank of Canada and HSBC were identified as Deutsche Bank's co-conspirators in manipulating these benchmark rates.¹¹⁹

286. Deutsche Bank also manipulated prices of precious metals and related derivatives in the United States. For example, in June 2017 Deutsche Bank trader David Liew pleaded guilty to Commodity Exchange Act violations associated with the concerted manipulation of silver and gold futures contract prices traded on the Chicago Mercantile Exchange.¹²⁰ Deutsche Bank settled antitrust class actions alleging their participation in a conspiracy to manipulate gold and silver benchmarks during the Class Period for \$98 million.¹²¹ Trader communications alleged in those actions identify Defendants HSBC and Bank of America Merrill Lynch as Deutsche Bank co-conspirators.¹²²

2. Bank of America Merrill Lynch

287. Bank of America Merrill Lynch conspired with co-Defendants HSBC, Deutsche Bank, and RBC to manipulate various benchmark rates during the Class Period. Bank of America executed a Consent Order on November 11, 2014, with the Comptroller of the Currency admitting its participation in a conspiracy to manipulate key benchmarks in the spot foreign exchange market, the WM/R fixings and the ECB spot FX reference rates.¹²³ These benchmarks were used to set the

¹¹⁸ Jonathan Stempel, *Deutsche Bank in \$190 mln currency-rigging settlement*, Reuters, (Sep. 29, 2017) available at <https://www.reuters.com/article/us-deutschebank-forex-settlement/deutsche-bank-in-190-mln-currency-rigging-settlement-idUSKCN1C42QW>.

¹¹⁹ *Id.*

¹²⁰ Tom Schoenberg, *Ex-Trader Linked to Deutsche Bank is Aiding U.S. Spoof Probe*, Bloomberg L.P., (June 2, 2017) <https://www.bloomberg.com/news/articles/2017-06-02/trader-pleading-guilty-in-metals-probe-tied-to-deutsche-bank>.

¹²¹ Jonathan Stempel, *Deutsche Bank to pay \$60 million to settle U.S. gold price-fixing case*, Reuters, (Dec. 2, 2016), available at <https://www.reuters.com/article/us-deutsche-bank-settlement-gold/deutsche-bank-to-pay-60-million-to-settle-u-s-gold-price-fixing-case-idUSKBN13R2N1>.

¹²² See e.g., Third Consolidated Amended Class Action Complaint, *In re London Silver Fixing, Ltd., Antitrust Litigation*, ECF No. 258, at 131-45.

¹²³ *In the Matter of: Bank of America, N.A. Charlotte, North Carolina*, Consent Order, OCC No. AA-EC-14-99, 2014 WL 8239417 (O.C.C.) (Nov. 11, 2014), available at <https://www.occ.treas.gov/news-issuances/news-releases/2014/nr-occ-2014-157a.pdf>.

prices of trillions of dollars in spot FX transactions daily, including spot FX trades involving the Canadian dollar.

288. Bank of America paid \$250 million and admitted to using secret group chatrooms to conspire with competitors at other banks to manipulate spot FX prices to benefit its financial positions. As part of the settlement, the OCC found that Bank of America executed “coordinated trading strategies” with traders at other banks to rig the WM/R fixing and the ECB spot FX reference rates in its favor, conspired with traders at other banks to trigger customer stop loss orders, and shared sensitive customer order information with rival banks to trade in advance of customer orders for its own benefit.¹²⁴ Bank of America further admitted to compliance failures in its derivatives trading business, which caused its membership in the conspiracy to continue without scrutiny from at least 2008 through 2013.¹²⁵

289. In May 2016, Bank of America agreed to pay \$50 million to settle allegations that it conspired with HSBC and other banks to manipulate ISDAfix—a benchmark used to price certain swaps transactions, commercial real estate mortgages, and structured debt securities. The plaintiffs in that case alleged that Bank of America submitted identical or nearly identical rates to move ISDAfix in a direction that unlawfully increased profits from the cartel’s positions on interest rate swaps from 2006 through 2013.¹²⁶

290. In September 2017, Merrill Lynch admitted that traders on its swaps desk traded futures contracts on the CME for their own benefit in advance of large block orders from customers, an unlawful practice known as “front-running” that extracts illicit profit for the bank at

¹²⁴ *Id.*, at 4-5.

¹²⁵ *Id.* at 5-6.

¹²⁶ Second Consolidated Amended Class Action Complaint, *Alaska Electrical Pension Fund, et al. v. Bank of America N.A., et al.*, No. 14-cv-7126 (JMF), ECF No. 387 (S.D.N.Y. Feb. 7, 2017.).

the expense of its own customer.¹²⁷ Merrill Lynch engaged in this conduct from at least February 2008 through December 2010. Merrill Lynch further admitted that traders eavesdropped on calls between customers and sales staff so that traders could profit by trading ahead of its customers.

291. Merrill Lynch traders made misleading statements to investigators from the CME, causing its misconduct to go undetected for years. For example, Merrill Lynch claimed that there was not enough time between customer orders and order execution for it to trade ahead of customer orders. Merrill Lynch's counsel wrote to CME investigators that traders "did not have advance knowledge of a block trade such as to enable them to engage in any trading prior to the execution of the block," even though traders were actually listening in on the phone calls while orders were placed.¹²⁸ The CFTC later found that these statements were false, that Merrill Lynch failed to supervise traders on its Swaps Desk, and fined Merrill Lynch \$2.5 million.¹²⁹

3. HSBC

292. HSBC was fined over \$35 million by the European Commission for colluding with other banks, including Deutsche Bank, to manipulate Euribor in December 2016.¹³⁰ The Commission found that HSBC conspired with other members of the panel to fix Euribor in a direction that benefitted their trading positions. Additionally, the Commission found that as part of the conspiracy HSBC and the other panel banks exchanged sensitive information on their trading positions and strategies to align actions. The fine marked the culmination of a five-year investigation by the European Commission into Euribor panel banks that resulted in over \$1 billion in fines.

¹²⁷ Order Instituting Proceedings Pursuant To Section 6(C) and 6(D) of The Commodity Exchange Act, Making Findings and Imposing Remedial Sanctions, *In the Matter of Merrill, Lynch, Pierce, Fenner & Smith, Incorporated*, CFTC Docket No: 17-25, 2017 WL 4251741 (Sep. 22, 2017).

¹²⁸ *See id.*, at 2-3.

¹²⁹ *Id.* at 4-5, 9.

¹³⁰ European Commission, *Antitrust: Commission fines Crédit Agricole, HSBC and JPMorgan Chase €485 million for euro interest rate derivatives cartel* (December 7, 2016), http://europa.eu/rapid/press-release_IP-16-4304_en.htm.

293. In November of 2014 the CFTC imposed a \$275 million civil monetary penalty on HSBC for conspiring with four other banks to manipulate the global foreign exchange benchmark rates to benefit their trading positions.¹³¹ The CFTC collectively imposed over \$1.4 billion in civil monetary penalties against the five banks involved. The United Kingdom's Financial Conduct Authority ("FCA"), in a related matter, imposed a \$343 million fine on HSBC for failing to "manage obvious risks around confidentiality, conflicts of interest and trading conduct" with their foreign exchange traders.¹³² The FCA found that HSBC and four other defendant banks shared client information and manipulated G10 spot FX currency rates, including the Canadian dollar, to benefit their trading positions.

294. HSBC has also been implicated in conspiring to manipulate the ISDAfix benchmark, a rate used to price certain interest rate swaps, as part of a conspiracy with Bank of America and Deutsche Bank from at least 2009 to 2012.¹³³ HSBC paid \$14 million in May of 2016 to settle a civil class action brought by investors for this alleged misconduct.

295. HSBC paid out \$18.5 million to settle a class action alleging that it conspired with other panel banks to suppress the LIBOR benchmark rate to benefit its LIBOR-based financial positions.¹³⁴ Plaintiffs there alleged that HSBC, in collusion with other panel banks including Bank

¹³¹ U.S. Commodity Futures Trading Commission, *CFTC Orders Five Banks to Pay over \$1.4 Billion in Penalties for Attempted Manipulation of Foreign Exchange Benchmark Rates* (November 12, 2014) <http://www.cftc.gov/PressRoom/PressReleases/pr7056-14>.

¹³² Financial Conduct Authority, *FCA fines five banks £1.1 billion for FX failings and announces industry-wide remediation programme* (December 11, 2014), <https://www.fca.org.uk/news/press-releases/fca-fines-five-banks-£11-billion-fx-failings-and-announces-industry-wide>.

¹³³ Thomson Reuters, *Seven big banks settle U.S. rate-rigging lawsuit for \$324 million* (May 3, 2016) <https://www.reuters.com/article/us-banks-rigging-settlement/seven-big-banks-settle-u-s-rate-rigging-lawsuit-for-324-million-idUSKCN0XU2B5>.

¹³⁴ Thomson Reuters, *Citi, Deutsche Bank, HSBC agree to pay \$132 million to settle Libor claims* (October 12, 2017) <https://www.reuters.com/article/us-libor-settlement/citi-deutsche-bank-hsbc-agree-to-pay-132-million-to-settle-libor-claims-idUSKBN1CH36N>.

of America Merrill Lynch, Deutsche Bank, and RBC, conspired to manipulate LIBOR to benefit their derivatives positions.

296. HSBC reached a separate settlement over similar claims in January of 2016, agreeing to pay \$35 million over allegations they conspired with other panel banks to manipulate Yen-LIBOR and the Euroyen Tokyo Interbank Offered Rate (“TIBOR”) to benefit their trading positions from at least 2006 through 2010.¹³⁵ Like CDOR, Yen-LIBOR and Euroyen TIBOR are supposed to represent the rate at which banks are willing to lend funds. The settlement occurred after a CFTC investigation revealed that multiple panel banks were coordinating their Yen-LIBOR and TIBOR submissions to benefit their derivatives trading positions.

4. Royal Bank of Canada

297. RBC traders leveraged relationships with other panel banks to facilitate their manipulation of benchmark rates. For example, in the manipulation of LIBOR, communications produced by co-conspirator bank Barclays revealed direct evidence showing that RBC traders conspired with other panel bank traders to manipulate the benchmark and benefit the cartel’s trading positions. Many of the traders involved previously worked together at the same panel bank, and capitalized on those relationships to manipulate LIBOR.¹³⁶

298. In July of 2017 RBC paid \$15.5 million to settle claims alleging they joined a conspiracy with HSBC, Bank of America Merrill Lynch, and others to manipulate FX benchmark rates to benefit their trading positions.¹³⁷ Specifically, Plaintiffs alleged that RBC, in collusion with

¹³⁵ Thomson Reuters, *HSBC settles bondholders’ claims of Libor manipulation* (May 15, 2017) <https://www.reuters.com/article/us-libor-settlements/hsbc-settles-bondholders-claims-of-libor-manipulation-idUSKCN18B2QU>.

¹³⁶ Complaint at 116-17, *In Re Libor-Based Financial Instruments Antitrust Litigation*, 935 F.Supp.2d 666, S.D.N.Y., Mar. 29, 2013 (No. 1:11-md-02262-NRB).

¹³⁷ The Telegraph, *Banks settle currency manipulation claims for \$111m* (July 30, 2017) <http://www.telegraph.co.uk/business/2017/07/30/banks-settle-currency-manipulation-claims-111m/>.

other panel banks, shared non-public price information about customers' orders and their net trading positions, and agreed to engage in collusive trading strategies to manipulate FX benchmarks in a direction favorable to the cartel's trading positions. This litigation followed worldwide probes into currency manipulation that resulted in about \$10 billion in fines for several large banks, including HSBC and Bank of America Merrill Lynch.

V. Plaintiff Was Injured by Transacting CDOR-Based Derivatives at Artificial Prices Caused by Defendants' Manipulative Conduct

299. Plaintiff entered CDOR-Based Derivatives transactions, including for Canadian dollar foreign exchange forwards and interest rate swaps, during the Class Period. Specifically, Plaintiff FPPA entered transactions for more than \$1.1 billion in Canadian dollar foreign exchange forwards with Defendants Bank of America Merrill Lynch, BMO, BNS, Deutsche Bank, HSBC, RBC, and TD Bank, and more than more than \$123 million in CDOR-based interest rate swaps.

300. Plaintiff's CDOR-Based Derivatives transactions were priced, benchmarked, and/or settled based on CDOR in accordance with the pricing formulas and methodologies described in Part 1.D.2-5, above. Accordingly, Plaintiff's trades were directly affected by CDOR because CDOR formed a component of the price and/or amount of interest paid or received under those contracts.

301. During the Class Period, Defendants conspired to suppress CDOR by making artificially lower CDOR submissions. These artificially low submissions financially benefited Defendants' large net-short CDOR-Based Derivatives positions, which increased in value as CDOR declined and remained artificially low.

302. Defendants' manipulative conduct injured Plaintiff by causing it to pay more for or receive less than it should have in CDOR-Based Derivatives transactions entered while CDOR was suppressed during the Class Period. For example, each time FPPA purchased Canadian dollars pursuant to a CAD/USD foreign exchange forward it paid more for those Canadian dollars than it should have because CDOR was artificially low. FPPA entered more than 290 transactions like this

during the Class Period, including directly with Defendants, and suffered monetary losses as a result. FPPA also entered its interest rate swap transactions at artificial prices, agreeing to pay more or receive less interest than it should have because Defendants manipulated CDOR.

TRADE AND COMMERCE

303. Beginning on at least August 9, 2007, Defendants engaged in a continuing contract, combination, or conspiracy in restraint of trade in violation of the Sherman Act.

304. During the Class Period, Defendants traded substantial quantities of CDOR-Based Derivatives in a continuous and uninterrupted flow in interstate commerce to customers located in states other than the states in which Defendants produced CDOR-Based Derivatives.

305. The Defendants' business activities outlined in this Complaint were within the flow of and substantially affected interstate trade and commerce.

306. During the Class Period, the Defendants' conduct and their co-conspirators' conduct occurred in, affected, and foreseeably restrained interstate commerce of the United States.

CLASS ACTION ALLEGATIONS

307. Plaintiff brings this action pursuant to Rule 23 of the Federal Rules of Civil Procedure on its own behalf and as a representative of the following Class:¹³⁸

All persons or entities that engaged in U.S.-based transactions in financial instruments that were priced, benchmarked, and/or settled based on CDOR at any time from at least August 9, 2007, through June 30, 2014.

Excluded from the Class are Defendants and their employees, agents, affiliates, parents, subsidiaries and co-conspirators, whether or not named in this complaint, and the United States government.

308. The Class is so numerous that individual joinder of all members is impracticable.

While the exact number of Class members is unknown to Plaintiff at this time, Plaintiff is informed

¹³⁸ Plaintiff has defined the Class based on currently available information and hereby reserves the right to amend the definition of the Class, including, without limitation, membership criteria and the Class Period.

and believes that at least thousands of geographically-dispersed Class members transacted in CDOR-Based Derivatives during the Class Period.

309. Plaintiff's claims are typical of the claims of the other members of the Class. Plaintiff and the members of the Class sustained damages arising out of Defendants' common course of conduct in violation of law as complained of herein. The injuries and damages of each member of the Class were directly caused by Defendants' wrongful conduct in violation of the laws as alleged herein.

310. Plaintiff will fairly and adequately protect the interests of the members of the Class. Plaintiff is an adequate representative of the Class and has no interest which is adverse to the interests of absent Class members. Plaintiff has retained counsel competent and experienced in class action litigation, including antitrust and Commodity Exchange Act litigation.

311. Common questions of law and fact exist as to all members of the Class, which predominate over any questions solely affecting individual members of the Class. These common questions of law and fact include, without limitation:

- a. whether Defendants and their co-conspirators engaged in a combination or conspiracy to manipulate CDOR and the prices of CDOR-Based Derivatives in violation of the Sherman Act;
- b. the identity of the participants in the conspiracy;
- c. the duration of the conspiracy;
- d. the character and nature of the acts performed by the Defendants in furtherance of their conspiracy;
- e. whether Defendants' unlawful conduct caused injury to the business and property of Plaintiff and the Class;
- f. whether Defendants' unlawful acts violate the RICO Act;
- g. whether Defendants manipulated the price of Canadian dollar futures contracts and other CDOR-based financial instruments in violation of the CEA;

h. the appropriate measure of damages sustained by Plaintiff and Class members.

312. A class action is superior to other methods for the fair and efficient adjudication of this controversy because joinder of all Class members is impracticable. Treatment as a class will permit a large number of similarly-situated persons to adjudicate their common claims in a single forum simultaneously, efficiently, and without the duplication of effort and expense that numerous individual actions would engender. Class treatment will also permit the adjudication of claims by many Class members who could not afford individually to litigate claims such as those asserted in this Complaint. The cost to the court system of adjudication of such individualized litigation would be substantial. The prosecution of separate actions by individual members of the Class would create a risk of inconsistent or varying adjudications establishing incompatible standards of conduct for the Defendants.

313. Plaintiff is unaware of any difficulties that are likely to be encountered in the management of this action that would preclude its maintenance as a class action.

EQUITABLE TOLLING AND FRAUDULENT CONCEALMENT

314. The applicable statutes of limitations relating to the claims for relief alleged herein were tolled because of fraudulent concealment involving both active acts of concealment by Defendants and inherently self-concealing conduct.

315. The secret nature of Defendants' conspiracy—which relied on non-public methods of communication, including private instant messages, telephone calls, and CBA meetings conducted behind closed doors to conceal their agreements to manipulate CDOR and the prices of CDOR-Based Derivatives—was intentionally self-concealing. This concealment-through-secrecy prevented Plaintiff from uncovering Defendants' unlawful conduct.

316. Defendants used affirmative acts of concealment to hide their violations of law from Plaintiff and the Class, including: (1) knowingly submitting (or causing to be submitted) CDOR quotes that were false, misleading, or inaccurate because they were manipulative, based in whole or in part on impermissible and illegitimate factors, such as the rate that would financially benefit Defendants' CDOR-Based Derivatives positions and/or the CDOR-Based Derivatives positions of their co-conspirators; (2) implicitly representing that their CDOR submissions were a reliable and truthful assessment of, and only of, the rate at which each Defendant would lend using Bankers Acceptances; (3) representing, through the CBA and its subcommittees, that CDOR was a legitimate benchmark and was not subject to the type of manipulation that has been observed in other interbank lending rate.

317. Defendants also used secret chatrooms and text messages sent from their mobile phones to coordinate misconduct. For example, traders from RBC, Deutsche Bank, HSBC, and Merrill Lynch routinely used "disappearing" messages on the Snapchat as well as, code words, and deliberate misspellings in electronic chatrooms to conceal their communications about manipulating foreign exchange benchmark rates from compliance and government regulators during the Class Period.¹³⁹

318. Many, if not all, of these affirmative acts of concealment were also inherently self-concealing and could not be detected by Plaintiff or other members of the Class. Defendants engaged in multiple forms of price fixing, which are inherently self-concealing and could not be detected by Plaintiff or other members of the Class.

319. As a result, Plaintiff and the Class had no knowledge of Defendants' unlawful and self-concealing manipulative acts and could not have discovered same by exercise of due diligence.

¹³⁹ Statement of Claim at ¶¶ 291-31, *Labourer's Pension Fund of Central and East Canada v. Royal Bank of Canada*, 2016 ONSC 6953 (Can. Ont. Super. Ct. J.) (No. CV-15-536174).

Plaintiff thus assert the tolling of the applicable statutes of limitations affecting the rights of the claims for relief asserted. Defendants are also equitably estopped from asserting that any otherwise applicable limitations period has run.

CLAIMS FOR RELIEF

FIRST CLAIM FOR RELIEF

Conspiracy to Restrain Trade in Violation of § 1 of the Sherman Act

Against all Defendants

320. Plaintiff hereby incorporates each preceding and succeeding paragraph as though fully set forth herein.

321. Defendants and their unnamed co-conspirators entered into and engaged in a combination and conspiracy in an unreasonable and unlawful restraint of trade in violation of § 1 of the Sherman Act, 15 U.S.C. § 1, *et seq.*

322. During the Class Period, Defendants entered into a series of agreements designed to create profit or limit liabilities amongst themselves by coordinating the manipulation of CDOR and the prices of CDOR-Based Derivatives, by conspiring to, *inter alia*: making false CDOR rate submissions that did not reflect the actual rate at which Defendants offered to lend against BAs.

323. This conspiracy to manipulate the prices of CDOR-Based Derivatives caused both Plaintiff and members of the Class to be overcharged and underpaid in their CDOR-Based Derivatives transactions. Plaintiff and members of the Class also were deprived of the ability to accurately price CDOR-Based Derivatives they transacted in during the Class Period and to accurately determine the settlement value of CDOR-Based Derivatives by reference to an accurate CDOR. Plaintiff and members of the Class thus received, during the term of their transactions and upon settlement, less in value than they would have received absent Defendants' conspiracy and overt acts in furtherance of the conspiracy.

324. The conspiracy is a *per se* violation of § 1 of the Sherman Act. Alternatively, the conspiracy resulted in substantial anticompetitive effects in the CDOR-Based Derivatives market. There is no legitimate business justification for, and no pro-competitive benefits caused by, Defendants' conspiracy to fix CDOR-Based Derivatives prices or the overt acts taken in furtherance thereof. Any ostensible procompetitive benefits are pre-textual or could have been achieved by less restrictive means.

325. As a direct, material, and proximate result of Defendants' violation of § 1 of the Sherman Act, Plaintiff and the Class have suffered injury to their business and property, within the meaning of § 4 of the Clayton Act throughout the Class Period.

326. Plaintiff and members of the Class seek treble damages for Defendants' violations of § 1 of the Sherman Act and under § 4 of the Clayton Act.

327. Plaintiff and members of the class also seek an injunction against Defendants, preventing and restraining the violations alleged above, under § 16 of the Clayton Act.

SECOND CLAIM FOR RELIEF

Manipulation in Violation of the Commodity Exchange Act

(7 U.S.C. §§ 1, *et seq.*)

Against All Defendants

328. Plaintiff hereby incorporate each preceding and succeeding paragraph as though fully set forth herein.

329. Each Defendant is liable under §§ 6(c), 9, and 22, of the CEA, codified at 7 U.S.C. §§ 9, 13, and 25 respectively, for the manipulation of CDOR and the prices of CDOR-Based Derivatives that were priced, benchmarked, and/or settled based on CDOR.

330. Defendants had the ability to manipulate CDOR and the price of CDOR-Based Derivatives. Defendants, through interstate commerce, knowingly submitted or caused to be

submitted false CDOR quotes to Thomson Reuters. These submissions and manipulative trades were used to determine the official published CDOR. By virtue of the CDOR calculation methodology and Defendants' positions as CDOR Panel Defendants, the Defendants possessed the ability to influence and took actions affecting the officially published CDOR. Further, because of their market power as the largest dealers of CDOR-Based Derivatives, Defendants had the ability to influence and took actions to affect the prices of CDOR-Based Derivatives.

331. The Defendants intentionally, and systematically manipulated CDOR and CDOR-Based Derivatives prices, including CDOR-based swaps and Canadian dollar futures contracts, to artificial levels in order to obtain hundreds of millions (if not billions) of dollars in illegitimate profits on CDOR-Based Derivatives, held by themselves or other co-conspirators. As described in Part I.D.2-5 above, CDOR directly controlled the prices (and thus profits or losses) of Defendants' CDOR-Based Derivatives positions. As an intended and direct consequence of Defendants' knowingly unlawful conduct, the prices of Plaintiff's CDOR-Based Derivatives, and those traded by Class members, were manipulated to artificial levels by Defendants.

332. During the Class Period, CDOR and the prices of derivatives that were priced, benchmarked, and/or settled based on CDOR were artificial and did not result from legitimate market information, competition, or supply and demand factors. Defendants directly caused artificial CDOR and artificial prices of CDOR-Based Derivatives by, inter alia, making false CDOR submissions to Thomson Reuters and transacting CDOR-Based Derivatives at artificial prices that created artificial supply and demand.

333. As a direct result of Defendants' unlawful conduct, Plaintiff and members of the Class have suffered actual damages and injury in fact due to artificial CDOR and prices of derivatives that were priced, benchmarked, and/or settled based on CDOR.

THIRD CLAIM FOR RELIEF

Principal-Agent Liability in Violation of § 2 of the Commodity Exchange Act

Against All Defendants

334. Plaintiff hereby incorporates each preceding and succeeding paragraph as though fully set forth herein.

335. Each Defendant is liable under Section 2(a)(1) of the CEA, 7 U.S.C. §2(a)(1), for the manipulative acts of their agents, representatives and/or other persons acting for them in the scope of their employment.

336. Plaintiff and members of the Class seek the actual damages they sustained in CDOR-Based Derivatives for violations of the CEA alleged herein.

FOURTH CLAIM FOR RELIEF

Aiding and Abetting Liability in Violation of § 22 of the Commodity Exchange Act

Against All Defendants

337. Plaintiff hereby incorporates each preceding and succeeding paragraph as though fully set forth herein.

338. Defendants knowingly aided, abetted, counseled, induced, and/or procured the violations of the CEA as alleged herein. Defendants did so with knowledge of each other's manipulation of CDOR and willfully intended to assist these manipulations, which resulted in artificial CDOR-Based Derivatives prices during the Class Period in violation of § 22(a)(1) of the CEA, 7 U.S.C. § 25(a)(1).

339. Plaintiff and members of the Class seek the actual damages they sustained in CDOR-Based Derivatives for the violations of the CEA alleged herein.

FIFTH CLAIM FOR RELIEF

Manipulation by False Reporting, Fraud and Deceit, and Employment of Manipulative Device or Contrivance in Violation of the Commodity Exchange Act, as Amended

(7 U.S.C. § 1, *et seq.* and CFTC Rule 180.1(a))

Against all Defendants

340. Plaintiff hereby incorporates each preceding and succeeding paragraph as though fully set forth herein.

341. By their intentional or reckless misconduct from August 15, 2011 through the end of the Class Period, Defendants each violated Section 6(c)(1) of the CEA, as amended, 7 U.S.C. § 9, and CFTC Rule 180.1 adopted under the CEA, 17 C.F.R. § 180.1(a) (2011) (“Rule 180.1”), and caused, or attempted to cause, the prices of CDOR-Based Derivatives, including CDOR-based swaps and Canadian Dollar futures contracts, to be artificial during the Class Period.

342. Under Section 6(c)(1) of the CEA, as amended, codified at 7 U.S.C. § 9, and Section 22 of the CEA, as amended, 7 U.S.C. § 25, it is unlawful for any person, directly or indirectly, to use or employ, or attempt to use or employ, in connection with any swap, or a contract of sale of any commodity in interstate commerce, or for future delivery on or subject to the rules of any registered entity, any manipulative or deceptive device or contrivance, in contravention of such rules and regulations as the CFTC shall promulgate.

343. In July 2011, the CFTC promulgated Rule 180.1(a), pursuant to CEA Section (6)(c)(1), which provides, in relevant part:

It shall be unlawful for any person, directly or indirectly, in connection with any swap, or contract of sale of any commodity in interstate commerce, or contract for future delivery on or subject to the rules of any registered entity, to intentionally or recklessly:

- (1) Use or employ, or attempt to use or employ, any manipulative device, scheme, or artifice to defraud;

- (2) Make, or attempt to make, any untrue or misleading statement of a material fact or to omit to state a material fact necessary in order to make the statements made not untrue or misleading;
- (3) Engage, or attempt to engage, in any act, practice, or course of business which operates or would operate as a fraud or deceit upon any person; or
- (4) Deliver or cause to be delivered, or attempt to deliver or cause to be delivered for transmission through mails or interstate commerce, by any means of communication whatsoever, a false or misleading or inaccurate report concerning crop or market information or conditions that affect or tend to affect the price of any commodity in interstate commerce, knowing or acting in reckless disregard of the fact that such report is false, misleading or inaccurate.

344. From August 15, 2011 through the end of the Class Period, Defendants, individually and in concert, intentionally or recklessly violated 7 U.S.C. § 1, et seq. and CFTC Rule 180.1(a) as follows:

345. Defendants used or employed, or attempted to use or employ, manipulative or deceptive devices, schemes, or artifices to defraud in connection with the contract of sale or purchase of CDOR-Based Derivatives, including CDOR-based swaps and Canadian dollar futures contracts in interstate commerce. Specifically, Defendants' manipulative devices, schemes or artifices to defraud consisted of their manipulative acts discussed herein to manipulate CDOR and the price of CDOR-Based Derivatives, including, inter alia, making false CDOR rate submissions that did not reflect actual prices and sharing proprietary information regarding CDOR-Based Derivatives prices and trading positions.

346. Defendants made, or attempted to make, untrue or misleading statements of material fact or omitted to state material facts in connection with the contract of sale or purchase of CDOR-Based Derivatives, including CDOR-based swaps and Canadian Dollar futures contracts in interstate commerce. Defendants' false CDOR rate submissions did not reflect actual prices, thus causing CDOR and the prices of the CDOR-Based Derivatives, including CDOR-based swaps and Canadian Dollar futures contracts, purchased by Plaintiff and members of the Class to be artificial.

Defendants made further untrue, inaccurate or misleading statements of material facts, or omissions of material facts necessary to make the statements made not misleading including, inter alia:

- (a) Making untrue, inaccurate or misleading statements to influence CDOR and the prices of CDOR-based Derivatives;
- (b) Failing to disclose that Defendants were unlawfully conspiring between and among themselves to manipulate CDOR and the price of CDOR-Based Derivatives; and
- (c) Failing to disclose that Defendants were reporting proprietary information regarding CDOR-Based Derivatives prices and trading positions to benefit their CDOR-Based Derivatives trading positions at the expense of Plaintiff and the Class.

347. Through their conspiracy to manipulate CDOR and the price of CDOR-Based Derivatives, including CDOR-based swaps and Canadian Dollar futures contracts, Defendants engaged in, or attempted to engage in, acts, practices, or a course of business which operated as a fraud or deceit upon Plaintiff and the Class.

348. Defendants delivered and caused to be delivered for transmission through the mails and interstate commerce, by multiple means of communication, including communications to Thomson Reuters, false reports of Defendants' individual CDOR submissions that affected or tended to affect CDOR and the prices of CDOR-Based Derivatives, which are commodities in interstate commerce, knowing, or acting in reckless disregard of the fact that such reports were false, misleading or inaccurate.

349. Defendants' conduct caused injury to Plaintiff and other members of the Class who transacted in an artificial and manipulated market, at manipulated prices, and with artificial price trends, during the Class Period.

350. Plaintiff and other members of the Class are each entitled to damages for the violations of the CEA alleged herein.

SIXTH CLAIM FOR RELIEF

Violation of the Racketeer Influenced and Corrupt Organizations Act

(18 U.S.C. §§ 1961 *et seq.*)

Against all Defendants

351. Plaintiff hereby incorporates each preceding and succeeding paragraph as though fully set forth herein.

352. 18 U.S.C. § 1962(c) makes it illegal for “any person employed by or associated with any enterprise engaged in, or the activities of which affect, interstate or foreign commerce, to conduct or participate, directly or indirectly, in the conduct of such enterprise’s affairs through a pattern of racketeering activity or collection of unlawful debt.”

353. 18 U.S.C. § 1962(d), in turn, makes it “unlawful for any person to conspire to violate any of the provisions of subsection (a), (b), or (c) of this section.”

354. Under 18 U.S.C. § 1961(1), and as applicable to § 1962, “racketeering activity” means (among other things) acts indictable under certain sections of Title 18, including 18 U.S.C. § 1343 (relating to wire fraud).

355. 18 U.S.C. § 1961(5) provides that, to constitute a “pattern of racketeering activity,” conduct “requires at least two acts of racketeering activity, one of which occurred after the effective date of this chapter and at least the last of which occurred within ten years (excluding any period of imprisonment) after the commission of a prior act of racketeering activity.”

356. 18 U.S.C. § 1961(3) defines “person” as “any individual or entity capable of holding a legal or beneficial interest in property,” and 18 U.S.C. § 1961(4) defines “enterprise” as “any individual, partnership, corporation, association or other legal entity, and any union or group of individuals associated in fact although not a legal entity.”

357. 18 U.S.C. § 1343, the wire fraud statute listed in 18 U.S.C. § 1961(1) as a RICO predicate act, provides that “[w]hoever, having devised or intending to devise any scheme or artifice to defraud, or for obtaining money or property by means of false or fraudulent pretenses, representation, or promises, transmits or causes to be transmitted by means of wire, fraud, radio, or television communication in interstate or foreign commerce, any writings, signs, signals, pictures, or sounds for the purpose of executing such a scheme or artifice, shall be fined under this title or imprisoned not more than 20 years, or both.”

358. At all relevant times, Defendants, including the employees who conducted Defendants’ affairs through illegal acts (including, *inter alia*, by making false CDOR rate submissions, engaging in fraudulent Bankers’ Acceptance transactions solely intended to impact CDOR, sharing proprietary order flow or position information with co-conspirators, directing other employees to do so, and trading CDOR-Based Derivatives with U.S. counterparties and on U.S. exchanges without disclosing that they were simultaneously suppressing CDOR, among other predicate acts of wire fraud), were “an enterprise” within the meaning of 18 U.S.C. § 1961(4), with a definable corporate structure and hierarchy of corporate direction and control.

359. At all relevant times, Plaintiff was a “person” within the meaning of 18 U.S.C. § 1961(3).

360. Defendants’ collective association, including through their participation together (i) as members of the CBA and its subcommittees; (ii) as CDOR Panel Dealers; and (iii) in the group of CDOR Panel Dealers who persistently made artificial CDOR submissions. Every member of the enterprise participated in the process of causing CDOR-Based Derivatives trades at artificial prices, CDOR-based derivative price quotes, trade confirmations including those false rates, and confirmations for collusive transactions intended to impact CDOR, during the Class Period. As

alleged herein, each Defendant engaged in the acts of wire fraud in furtherance of the conspiracy and participated as a member of the association-in-fact enterprise.

361. Defendants completed all elements of wire fraud within the United States or while crossing United States borders. Defendants did so by: (a) trading large quantities of CDOR-Based Derivatives in and with investors located in the United States without disclosing the material fact that Defendants were simultaneously engaged in manipulating CDOR; (b) transmitting or causing to be transmitted artificial CDOR rates in the U.S. or while crossing U.S. borders through electronic servers located in the United States; (c) transmitting or causing to be transmitted false and artificial CDOR submissions that were relied on by Thomson Reuters in collecting, calculating, publishing, and/or disseminating the daily CDOR rates that were transmitted, published, and disseminated in the United States or while crossing U.S. borders through electronic servers located in the United States; and (d) transmitting or causing to be transmitted confirmations for fraudulent transactions intended to impact CDOR in the U.S. or while crossing U.S. borders through electronic servers located in the United States.

362. The common purpose of the enterprise was simple: profiteering. By engaging in the predicate acts alleged including, but not limited to, coordinating false CDOR submissions to be transmitted to Thomson Reuters as agent for the CBA, and by exchanging CDOR-Based Derivatives positions and prices, Defendants affected the prices of CDOR-Based Derivatives, rendering them artificial. This directly resulted in Defendants reaping hundreds of millions (if not billions) of dollars in illicit trading profits on their CDOR-Based Derivatives positions.

363. Defendants each committed far more than two predicate acts of wire fraud. As alleged in detail herein, Defendants engaged in at least the following predicate acts of wire fraud:

- a. The transmission of artificial CDOR rates to Thomson Reuters in the United States for further dissemination;

- b. The electronic transmission of confirmations for transactions that Defendants used to profit from their manipulation of CDOR;
 - c. Causing the transmission and dissemination in the United States of the artificial CDOR rates by Thomson Reuters as agent for the CBA;
 - d. Causing the transmission and dissemination in the United States of distorted CDOR individual bank quotes by Thomson Reuters;
 - e. The transmission and dissemination of false bid and ask price quotes for CDOR-Based Derivatives within the United States;
 - f. Electronic communications and instant messages containing manipulative requests that emanated from within the United States or were routed through electronic servers located within the United States;
 - g. Sending trade confirmations based on manipulated and false CDOR rates to counterparties within the United States; and
 - h. Sending communications to encourage, negotiate, or complete the sale or purchase of price-fixed CDOR-based financial instruments to counterparties and on exchanges within the United States.
364. Defendants' misconduct underlying the predicate acts of wire fraud occurred within

the United States. Defendants caused and conspired to cause the manipulated CDOR to be published to servers in the U.S., and used U.S. wires to transmit artificial CDOR rates, confirmations for collusive transactions intended to impact CDOR, and other electronic communications containing requests to manipulate these rates.

365. Defendants' racketeering scheme affected interstate commerce. Trillions of dollars in CDOR-Based Derivatives were traded within the United States during the Class Period, including, but not limited to, currency forward agreements, futures contracts, interest rate swaps, and forward rate agreements.

366. As alleged herein, Plaintiff's and the Class' injuries were direct, proximate, foreseeable, and natural consequences of Defendants' conspiracy; indeed, depriving Plaintiff and the Class of their money relative to their CDOR-Based Derivatives contracts was the very purpose of the Defendants' scheme. Plaintiff and members of the Class seek treble damages for the injuries they

have sustained, as well as restitution, cost of suit, and reasonable attorneys' fees in accordance with 18 U.S.C. § 1964(c).

367. As a direct and proximate result of the subject racketeering activities, Plaintiff and members of the Class seek an order, in accordance with 18 U.S.C. § 1964(a), enjoining and prohibiting Defendants from further engaging in their unlawful conduct.

SEVENTH CLAIM FOR RELIEF

Unjust Enrichment in Violation of Common Law

Against Defendants Bank of America Merrill Lynch, BMO, BNS, Deutsche Bank, HSBC, RBC, and TD Bank

368. Plaintiff hereby incorporates each preceding and succeeding paragraph as though fully set forth herein.

369. To the extent required this claim is pled in the alternative to Plaintiff's eighth claim for relief in accordance with FED. R. CIV. P. 8(d) and other applicable law.

370. Plaintiff FPPA entered into CDOR-Based Derivatives transactions, including for Canadian dollar foreign exchange forwards, directly with Defendants Bank of America Merrill Lynch, BMO, BNS, Deutsche Bank, HSBC, RBC, and TD Bank.

371. As alleged in Part I.D.4, above, these transactions were priced, benchmarked, and/or settled based on CDOR and directly incorporated CDOR as a component of price.

372. CDOR should reflect the rate of interest at which Defendants offered to lend Canadian dollars in North American transactions for BAs as of 10:15 A.M. Eastern Standard Time. However, during the Class Period, Defendants conspired to manipulate CDOR and the prices of CDOR-Based Derivatives by making artificially lower CDOR submissions that did not reflect the true cost of borrowing Canadian dollars in North America.

373. Defendants financially benefited from suppressing CDOR during the Class Period because of their large net-short exposure to that rate. *See* Part II, above. Thus, Defendants profits increased as CDOR decreased and remained artificially low as a result of their misconduct

374. Any gain to Defendants from manipulating CDOR came at the expense of Plaintiff and the Class who entered CDOR-Based Derivatives transactions directly with Defendants and were injured, lost money, and were otherwise deprived of the benefit of accurate CDOR rates, as well as the ability to accurately price, benchmark and or settle CDOR-Based Derivatives transactions. As a result, Plaintiff and the Class received, upon execution or settlement of their trades, less in value than they would have received absent Defendants' wrongful conduct. Plaintiff's and the Class' losses correspond to Defendants' unlawful gains.

375. Because of the acts of Defendants and their co-conspirators as alleged herein, Defendants have been unjustly enriched at the expense of Plaintiff and members of the Class.

376. Plaintiff and members of the Class seek restitution of the monies of which they were unfairly and improperly deprived as described herein.

EIGHTH CLAIM FOR RELIEF

Breach of the Implied Covenant of Good Faith and Fair Dealing

Against Defendants Bank of America Merrill Lynch, BMO, BNS, Deutsche Bank, HSBC, RBC, and TD Bank

377. Plaintiff hereby incorporates each preceding and succeeding paragraph as though fully set forth herein.

378. To the extent required this claim is pled in the alternative to Plaintiff's seventh claim for relief in accordance with FED. R. CIV. P. 8(d) and other applicable law.

379. Plaintiff FPPA entered into binding and enforceable contracts with Defendants Bank of America Merrill Lynch, BMO, BNS, Deutsche Bank, HSBC, RBC, and TD Bank in connection with transactions for CDOR-Based Derivatives.

380. Each contract includes an implied covenant of good faith and fair dealing, requiring each contracting party to act in good faith and deal fairly with the other, and not to take any action which would have the effect of destroying or injuring the right of the other party to receive the fruits of the contract.

381. Defendants Bank of America Merrill Lynch, BMO, BNS, Deutsche Bank, HSBC, RBC, and TD Bank breached their duty to Plaintiff FPPA and, without reasonable basis and with improper motive, acted in bad faith by, among other things, (a) intentionally making false CDOR submissions for the express purpose of generating illicit profits from its CDOR-Based Derivatives; and (b) conspiring with other Defendants to manipulate CDOR and the prices of CDOR-Based Derivatives.

382. As a direct and proximate result of these breaches of the implied covenant of good faith and fair dealing and of Defendants' frustration of the purpose of these contracts, Plaintiff FPPA, and similarly situated members of the Class, have been damaged as alleged herein in an amount to be proven at trial.

PRAYER FOR RELIEF

Plaintiff demands relief as follows:

A. That the Court certify this lawsuit as a class action under Rules 23(a) and (b)(3) of the Federal Rules of Civil Procedure, that Plaintiff be designated as class representatives and that Plaintiff's counsel be appointed as Class counsel;

B. That the unlawful conduct alleged herein be adjudged and decreed to violate §1 of the Sherman Antitrust Act, 15 U.S.C. § 1;

C. That Defendants be permanently enjoined and restrained from continuing and maintaining the conspiracy alleged in the Complaint under § 16 of the Clayton Antitrust Act, 16 U.S.C. § 26;

D. That the Court award Plaintiff and the Class damages against Defendants for their violation of federal antitrust laws, in an amount to be trebled under § 4 of the Clayton Antitrust Act, 15 U.S.C. § 15, plus interest;

E. That the unlawful conduct alleged herein be adjudged and decreed to be an unlawful enterprise in violation of RICO;

F. For a judgment awarding Plaintiff and the Class damages against Defendants for their violation of RICO, in an amount to be trebled in accordance with such laws;

G. That the Court award Plaintiff and the Class damages against Defendants for their violations of the Commodity Exchange Act;

H. That the Court order Defendants to disgorge their ill-gotten gains from which a constructive trust be established for restitution to Plaintiff and the Class;

I. That the unlawful conduct alleged herein be adjudged and decreed to violate the implied covenant of good faith and fair dealing;

J. That the Court award Plaintiff and the Class their costs of suit, including reasonable attorneys' fees and expenses, including expert fees, as provided by law;

K. That the Court award Plaintiff and the Class prejudgment interest at the maximum rate allowable by law; and

L. That the Court directs such further relief as it may deem just and proper.

DEMAND FOR JURY TRIAL

Pursuant to Rule 38(b) of the Federal Rules of Civil Procedure, Plaintiff demand a jury trial as to all issues triable by a jury.

Dated: January 12, 2018
White Plains, New York

Respectfully submitted,

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